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**Datasheet for the decision  
of 16 March 2010**

**Case Number:** T 0741/07 - 3.2.04

**Application Number:** 02075755.5

**Publication Number:** 1236393

**IPC:** A01K 5/02

**Language of the proceedings:** EN

**Title of invention:**

A feed metering device and a method of supplying fodder and/or drink in metered portions to an animal

**Patentee:**

Lely Enterprises AG

**Opponent:**

DeLaval International AB

**Headword:**

Detecting device/LELY

**Relevant legal provisions:**

EPC Art. 54, 111(1)

**Relevant legal provisions (EPC 1973):**

-

**Keyword:**

"Novelty (yes)"  
"Remittal"

**Decisions cited:**

-

**Catchword:**

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Case Number: T 0741/07 - 3.2.04

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.04  
of 16 March 2010

**Appellant:**  
(Patent Proprietor)

Lely Enterprises AG  
Bützenweg 20  
CH-6300 Zug (CH)

**Representative:**

Corten, Maurice Jean F.M.  
Octrooibureau Van der Lely N.V.  
Weverskade 110  
NL-3147 PA Maassluis (NL)

**Respondent:**  
(Opponent)

DeLaval Holding AB  
P.O. Box 39  
S-147 21 Tumba (SE)

**Representative:**

Amery, Marcus James  
A.A. Thornton & Co.  
235 High Holborn  
London WC1V 7LE (GB)

**Decision under appeal:**

Decision of the Opposition Division of the  
European Patent Office posted 4 April 2007  
revoking European patent No. 1236393 pursuant  
to Article 102(1) EPC.

**Composition of the Board:**

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

## Summary of Facts and Submissions

- I. The opposition division by its decision dated 4 April 2007 revoked the European patent No. 1 236 393.

The opposition division held that the subject-matter of granted claims 1 and 14 lacked novelty over document WO-A-86/01977 (D7).

- II. On 24 April 2007 the patent proprietor (hereinafter appellant) lodged an appeal against this decision and simultaneously paid the appeal fee.

A statement setting out the grounds of appeal was received on 7 August 2007.

- III. Together with his reply to the grounds of appeal dated 3 March 2008, the respondent submitted prior uses of a feed monitoring system called "BC40" developed by the Norwegian company "BioControl AS", namely:

- an Affidavit of Dr. Even Jahren (Annex I),
- an Affidavit of Mr Lennart Söderman (Annex II),
- documents concerning the supply of the system "BC40" to "Norges Landbrukshøgskole" (Annexes III.a to III.c),
- documents concerning the correspondence between Alfa Laval Agri and the University of Padova (Annexes IV.a and IV.b),

- documents concerning the supply of the system "BC40" to AVEVE Veevoeding (Annexes V.a and V.b),
  - documents concerning the supply of the system "BC40" to Tadini farm (Annexes VII.a to VI.e), and
  - "Research Systems for Controlling the Roughage Intake", CRI (Annex VII).
- IV. Oral proceedings before the board were held on 16 March 2010.
- V. The appellant requested that the decision under appeal be set aside and the patent be maintained as granted (main request), or the patent be maintained in an amended form on the basis of the first auxiliary request filed during the oral proceedings, or on the basis of the second auxiliary request filed as "auxiliary request" with the grounds of appeal, or on the basis of the third auxiliary request filed as "further auxiliary request" with the grounds of appeal, or on the basis of the fourth auxiliary request filed during oral proceedings.

The appellant also requested that the case be remitted to the department of first instance in case the prior uses should be admitted into the proceedings and also for consideration of the issue of inventive step, irrespective of the admission of the prior uses.

Granted claim 1 reads as follows:

- "1. A feed metering device (1; 2) for supplying fodder and/or drink in metered portions to an animal,

said feed metering device (1; 2) being provided with a feeding trough (3; 4) for containing feed, an entrance opening (5; 6) to the feeding trough (3; 4), a closing means (7; 4) for closing the entrance opening (5; 6), and a feed supplying device (17; 16) for intermittently supplying a quantity of fodder and/or drink into the feeding trough, **characterized in that** the feed metering device (1; 2) is provided with a detection device (19; 18) for determining the quantity of fodder and/or drink in the feeding trough (3; 4) at a point of time after a supply of a quantity of fodder and/or drink and for issuing, in dependence of the result of the quantity determination, a signal for operating the closing means (7; 4)."

Claim 1 of the first auxiliary request, which is identical with granted claim 14, reads as follows:

"1. A method of supplying fodder and/or drink in metered portions to an animal, which method comprises the step of supplying a to be supplied quantity of fodder and/or drink into a feeding trough of a feed metering device, and the step of having an entrance opening to the feeding trough closed by a closing means, **characterized in that** the method comprises the step of determining the quantity of fodder and/or drink in the feeding trough at a point of time after the supply of the to be supplied quantity of fodder and/or drink, the step of having the entrance opening closed being performed in dependence of the determined quantity of fodder and/or drink."

VI. The respondent (opponent) requested that the appeal be dismissed. He also requested that the prior uses submitted in his reply to the grounds of appeal be admitted into the proceedings.

VII. The appellant essentially submitted that the claimed subject-matter of the main request and that of the first auxiliary request were novel over documents D7, US-A-4 297 974 (D1) and EP-A-610 171 (D5) and that the prior uses should not be admitted into the proceedings since they were less relevant than D7.

The respondent contested these arguments and submitted that the claimed subject-matter lacked novelty over D1, D5, D7 or the prior uses.

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Main request (novelty with respect to D7)*
  - 2.1 Document D7 discloses **a feed metering device for supplying fodder to an animal, said feed metering device being provided with a feeding trough ("manger") for containing feed, an entrance opening (12) to the feeding trough, a closing means ("blocking means", see page 7, lines 13 to 16) for closing the entrance opening (12), and a feed supplying device ("wagon with fodder", see page 6, lines 1 to 6) for intermittently supplying a quantity of fodder into the feeding trough, the feed metering device being provided with a detection device comprising a "weighting device" for**

weighting the trough and the content of fodder in it (see particularly page 4, line 22 to page 5, line 11) and thus for determining the quantity of fodder in the feeding trough.

Thus, this detection device is effective for determining the weight of the feeding trough when it is filled with fodder, i.e. **at a point of time after a supply of a quantity of fodder.**

It is also clear from D7 that the quantity of fodder in the trough measured by the detection device is transmitted to a computer which calculates the quantity of fodder allocated and eaten by an animal during each visit to the feeding trough and the total fodder intake of said animal. Thus, the device of D7 is suitable for supplying fodder **in metered portions** to an animal and for determining whether the animal has received enough fodder.

According to page 7, lines 9 to 16 of D7, the detection device is provided **for issuing a signal for operating the closing means** (i.e. closing the "blocking means") if it is established that an animal has received enough fodder. Thus, the closing means of the device according to D7 is controlled in dependence on the result that the animal has received enough fodder. This result is determined on the basis of the calculated total fodder intake which is inter alia dependent on the determinations of the fodder quantity present in the trough. In other words, the closing means of the device according to D7 is operated in dependence on data which are in relation to the determined quantity of fodder in the trough. In this respect, it has to be noted that

paragraph [0071] of the patent specification (column 12, lines 55 to 58) refers to the closing means as being controlled "with the aid of data **in relation to** the quantity of feed present in the feeding in the feeding trough" (emphasis added).

Thus, the signal for operating the closing means of the device according to D7 is also issued **in dependence on the result of the quantity determination** of the fodder present in the trough.

Therefore, the device of D7 discloses all the features of claim 1 of the main request.

2.1.1 In this respect, the respondent essentially submitted the following arguments:

D7 does not teach to close the closing means of the feed trough while an animal is eating and to issue a signal for operating the closing means in dependence on the measurement of the amount of fodder consumed during the momentary visit to the feeding trough. Therefore, this citation cannot anticipate the features of granted claim 1.

This argument is further supported by the fact that the closing means (12) of D7 can injure the animal eating fodder from the feed trough.

2.1.2 The board cannot accept these arguments for the following reasons:

Claim 1 does not require a closing means to close a feed trough "while an animal is eating". Claim 1



requires that a determination of fodder quantity is made at a point of time after fodder supply and that a closing signal is generated in dependence on the result of the quantity determination. Claim 1 generally defines a device in which the closing means is operated in dependence on the result of a quantity determination without specifying that the closing signal is issued in dependence on the measurement of the amount of fodder consumed during the momentary visit to the feeding trough.

As to the possible injury of an animal, claim 1 does not define means for preventing an animal from being injured by the closing means. Moreover, it cannot be derived from D7 that the blocking means may injure the animal.

2.2 Thus, the subject-matter of claim 1 of the main request lacks novelty over D7 (Article 54 EPC). Therefore, the appellant's main request has to be rejected.

3. *First auxiliary request (novelty with respect to D7, D1 and D5)*

3.1 Method claim 1 of the first auxiliary request comprises the steps "of supplying a **to be supplied** quantity of fodder ... into the feeding trough" and "of determining the quantity of fodder ... in the feeding trough at a point of time after **the** supply of **the** to be supplied quantity of fodder" (emphasis added). Thus, as submitted by the appellant, method claim 1 requires that a predetermined quantity of fodder is supplied into the feeding trough and that the determination of the fodder quantity in the feeding trough is made after

the same predetermined quantity has been supplied into the feeding trough. This interpretation is consistent with the description of the patent (column 12, lines 20 to 23) according to which "[t]he feed supplying device 17 [which supplies a quantity of feed into the feeding trough] is controlled in a manner known per se by software ensuring that the right amount of feed is supplied to the relevant cow".

- 3.1.1 In this respect, the respondent referred to the passage in column 12, lines 9 to 23 stating that the feed supplying device "supplies a quantity of feed, **possibly** with the aid of data from the animal identification device" (emphasis added) and submitted that a quantity of fodder may be supplied into the feeding trough without the aid of the animal identification device and, therefore - due to the fact that claim 1 does not refer to an animal identification system - the terms "a to be supplied quantity of fodder" cannot be construed as defining a known amount of fodder.

The board cannot accept this argument because a quantity of fodder to be supplied is necessarily a known predetermined quantity which with the aid of data from the animal identification system may be adapted to the needs of a given animal. In any case, this passage does not exclude the possibility of supplying a predetermined amount of fodder which is the same for all animals.

- 3.2 D7 does not disclose the step of supplying a predetermined amount of fodder into the feeding trough.

Thus, the subject-matter of claim 1 of this request differs from the method of D7 at least by the step of supplying a to be supplied quantity of fodder into the feeding trough.

3.3 D1 discloses (see column 2, lines 1 to 22) a method of supplying fodder in metered portions to an animal which method comprises the steps of

- supplying a to be supplied quantity of fodder into a feeding trough (the fodder is supplied in portions by means of a "dosing worm" 4 into a "food trough": see column 1, lines 52 to 56 and column 2, lines 1 to 10),
- having an entrance opening ("head insertion opening" 12) to the feeding trough closed by a closing means (the "valve" 7 is operated to close the access of the cow to fodder in such a way that the cow is forced to retract her head from the insertion opening: see column 2, lines 10 to 19),
- having the entrance opening closed being performed when a predetermined period of time sufficient for an animal to consume the allocated quantity of fodder has elapsed (this step implies the use of a clock or a timer).

3.3.1 The claimed subject-matter differs from the method of D1 at least by the step of determining the quantity of fodder in the feeding trough at a point of time after the supply of the to be supplied quantity of fodder.

3.3.2 In this respect, the respondent referred to granted claim 3 according to which "the detection device [for determining the quantity of fodder in the feeding

trough] comprises a clock," which according to paragraph [0007] (or claim 4) of the patent specification is used "for determining the duration from a supply of a quantity of fodder ... and for issuing ... a signal for operating the closing means". He submitted that according to the patent specification the steps of determining the quantity of fodder and of issuing a signal as defined in the characterising portion of claim 1 can be performed by a clock and that D1 discloses the use of a clock by which the steps of the characterising portion of claim 1 are carried out.

3.3.3 The board cannot accept these arguments for the following reasons:

- (i) The clock referred to in paragraph [0007] of the patent specification (or in claim 4) is provided for issuing "a **second** signal for operating the closing means", the closing means operating device being used "for operating the closing means **on the basis of the first and/or the second signal**" (emphasis added). Thus, this paragraph defines a device provided with a detection device for issuing a first signal and additionally a clock for issuing a second signal, the clock being used for measuring how long a quantity of fodder present in the feeding trough remains untouched (see paragraph [0006] of the patent specification).
- (ii) In any case, a clock setting a time limit cannot be used for "determining" - i.e. for establishing exactly, in particular by weighting - the quantity of fodder present in the trough at a point of time

after the supply of the quantity of fodder allocated to the animal. A period of time sufficient for an animal for consuming the allocated quantity of fodder could only provide an approximate estimation of the quantity of fodder which the animal could have eaten during the predetermined period of time.

Incidentally, it has to be noted that the first auxiliary request does not contain claim 3 in so far as the granted apparatus claims 1 to 13 have been deleted.

(iii) For the same reasons as in point (ii) above, the clock of D1 does not "determine" the quantity of fodder present in the trough at a point of time after the supply of the quantity of fodder allocated to the animal.

3.4 D5 also discloses a method of supplying fodder in metered portions to an animal, which method comprises the steps of

- supplying a plurality of metered portions of fodder into a feeding trough (6) by means of a "dosing device" (8),
- having an entrance opening to the feeding trough closed by a closing means (10 and 11),
- having the entrance opening closed being performed after the last portion of fodder has been supplied into the feeding trough.

Having regard to the considerations in the section 3.2.3(ii) above, even if this document - as submitted

by the respondent - teaches to use a clock setting a predetermined period of time sufficient for an animal to consume its allowed amount of fodder, it does not disclose a detecting device for determining the quantity of fodder in the feeding trough after the supply of the to be supplied quantity of fodder.

3.5 Therefore, the subject-matter of claim 1 of the first auxiliary request is novel over D7, D1 and D5.

4. *The evidence concerning the prior uses (admissibility)*

4.1 In his reply to the grounds of appeal, the respondent essentially argued that the filing of these prior uses was a reaction to the appellant's argument that the system described in D7 does not provide a closure system effective to interrupt an animal which is currently eating, at a point of time determined by the system, corresponding to a time when the animal is deemed to have consumed its allowed amount of food. Since these new prior uses have been submitted in the reply to the grounds of appeal and represents the respondent's reaction to the above appellant's argument in the grounds of appeal, they cannot be rejected as late filed.

4.2 The appellant, who did not contest the availability to the public of these prior uses, essentially submitted that this evidence should not be admitted because it was not more relevant than document D7.

The board cannot accept this argument because - as explained below - these prior uses concern a system which allows an identified animal to consume a

predetermined amount of fodder from the trough, determined by a weighting device, wherein the system, upon determining that a given animal has eaten its allowance, closes that animal out of the trough.

4.3 Therefore, the board decides to admit these prior uses into the proceedings.

5. *First auxiliary request (novelty with respect to the prior uses)*

5.1 The respondent submitted that the feed monitoring system BC40 as described in Annexes I, III.c and VII deprives of novelty the subject-matter of claim 1 of the first auxiliary request.

5.2 Annexes I, III.a, III.b and III.c refer to a feed monitoring system BC40 developed by BioControl AS and installed at the Norwegian College of Agricultural Engineering ("Norges Landbrukshøgskole") in 1993.

Annex III.c, which is entitled "*User manual for coarse fodder gate type BC40*", describes a method of supplying fodder in metered portions to an animal which method comprises the steps of

- supplying a quantity of fodder into a feeding trough,
- having an entrance opening to the feeding trough closed by a closing means ("gate"),
- continuously measuring (by means of weighting cells) the quantity of fodder in the feeding trough after the supply of the quantity of fodder,

- having the entrance opening closed being performed in dependence on whether the animal has eaten a predetermined quantity which represents a limit for how much it may eat.

Annex I refers to Annex VII ("CRI" document) as describing a system corresponding to the BC40 system installed at "Norges Landbrukshøgskole". Indeed, the "CRI" document discloses a method comprising the same steps of the method disclosed in Annex III.c.

Neither Annex III.c nor the "CRI" document discloses how fodder is fed into the feeding trough. Annex I makes it clear that the feed monitoring system BC40 installed at "Norges Landbrukshøgskole" included "a system for replenishing individual troughs".

In any case, this evidence does not disclose the step of supplying a predetermined amount of fodder, i.e. "a to be supplied quantity of fodder", into the feeding trough.

Therefore, the subject-matter of claim 1 of the first auxiliary request is novel over these prior uses.

6. *Remittal*

The decision under appeal does not deal with the issue of inventive step. Accordingly the board, as requested by the appellant, in exercising its discretion under Article 111(1) EPC, considers it appropriate to remit the case to the first instance for further prosecution.



**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 for further prosecution.

The Registrar:

The Chairman:

G. Magouliotis

M. Ceyte