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**Datasheet for the decision
of 6 October 2016**

Case Number: T 0827/12 - 3.2.04

Application Number: 99204058.4

Publication Number: 1008294

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Language of the proceedings: EN

Title of invention:

A method of automatically milking and feeding animals

Patent Proprietor:

MAASLAND N.V.

Opponent:

DeLaval International AB

Headword:

Relevant legal provisions:

EPC Art. 54, 56, 100(b)

Keyword:

Novelty - (yes) - after amendment

Inventive step - (yes) - after amendment

Grounds for opposition - insufficiency of disclosure (no)

Decisions cited:

Catchword:



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Case Number: T 0827/12 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 6 October 2016

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Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted on 3 February 2012 rejecting the opposition filed against European patent No. 1008294 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman A. de Vries
Members: J. Wright
C. Schmidt

Summary of Facts and Submissions

- I. By its written decision dated 3 February 2012 the opposition division rejected the opposition against the patent No. EP1008294. On the 2 March 2012 the appellant-opponent filed an appeal against the decision and paid the appeal fee simultaneously. The statement setting out the grounds of appeal was received on 12 June 2012.
- II. Opposition was filed against the patent as a whole and based on Article 100(b) (insufficiency of disclosure) and on Article 100(a) EPC (lack of novelty and inventive step).

The opposition division held that none of these grounds prejudiced maintenance of the patent as granted, having regard to the following documents amongst others:

D1: WO 00/13499

D3: WO96/19917

D11: D. Webb, "Mechanised Livestock Feeding", BSP Professional Books, Cambridge University Press 1990, pages v to vii and 181 to 184.

E1: Kerstin Svennersten-Sjaunja, "Efficient Milking", Tumba Sweden, Alfa Laval Agri, 1995, preface and page 26.

- III. The following document also played a role in the appeal:
- E2: J.Harmann et al: "Machine Milking and Lactation", Insight Books, 1992, pages 69 to 96.
- IV. Oral proceedings before the Board were duly held on 6 October 2016.

- V. The appellant-opponent requests that the decision under appeal be set aside and the patent be revoked.

The respondent-proprietor requests that the patent be maintained in amended form according to a main request, filed as auxiliary request 1 with letter dated 4 November 2011 or, alternatively, on the basis of auxiliary request 1, originally filed as auxiliary request 3 with letter dated 22 October 2012.

- VI. Claim 1 of the main request reads as follows:

"A method of automatically feeding and milking animals which are allowed to walk about freely in an area destined therefor and to visit individually a milking parlour provided with a milking robot and a feeding station, as well as a separate feeding stall provided with a further feeding station, in which method an animal visiting the milking parlour is identified and the current value of an individual milking parameter for the animal is determined, on the basis of which value there is decided whether or not the animal will be milked and fed during milking, wherein an animal visiting the separate feeding stall is identified and the current value of the individual milking parameter for said animal is determined, on the basis of which value there is decided whether or not the animal will be fed, characterized in that if and only if the current value of the individual milking parameter of an animal is within a first range, the relevant animal, when visiting the milking parlour, will be milked and fed during milking, and if and only if the current value of the individual milking parameter of the animal is within a second range, the relevant animal, when visiting the feeding stall, will be fed, in which method the first and second range do not overlap one

another and in that the first and second range are chosen in such a manner that they are not directly adjacent but are separated by a third range, while, if the current value of the individual milking parameter of the animal is within the third range, the animal, when visiting the milking parlour, will not be milked and, when visiting the separate feeding stall, will not be fed".

VII. The appellant-opponent argued as follows:

Sufficiency of disclosure

The number of milkings taking place after an individual animal has been milked, as claimed in granted claim 3, is an inappropriate choice of milking parameter as this will give no indication as to whether the individual animal should be milked or not, depending as it does only on how many other animals present themselves to be milked.

The skilled person would not be able to estimate current milk yield, this can only be discerned by actually milking the animal. Milk yield depends on factors such as udder pressure and milk remainder in the udder so it cannot be estimated from milk secretion alone, as E2 shows. It would also not be possible to derive suitable thresholds for meaningful comparison of such a milking parameter, or fractions thereof since the only reliable milk yield data available is at actual milking time.

Novelty, main request

D1 discloses all features of claim 1. In particular D1 discloses to stop supplying food at a simple feeding station a short time before the optimum milking time

but to only start to milk and feed at a milking parlour at the optimum milking time. Therefore there is a time when animals can not be fed or milked and fed, which corresponds to the claimed third milking parameter range. Furthermore, food is dispensed at the simple feeding stations so that the animal is hungry again at milking. This also implies a time when they can be neither fed nor milked and fed, that is the third milking parameter range as claimed. D11 discloses supplying concentrate in a time-rationed way. It is essential to supply concentrate like this for the health of the animals. Therefore this is implicitly the feeding regime of D1. The gap in time when a ration is no longer supplied also constitutes a third milking parameter range as claimed. Feed is no longer supplied at the milking station prior to the end of milking. This also constitutes a third milking parameter range as claimed.

D3 discloses all features of claim 1, in particular it describes a series of separate feeding stalls and a milking and feeding stall, whereby the outer feeding stall is turned off for a particular animal before the milking and feeding stall is available to it, allowing it time to move thereto. Thus this constitutes a third range of milking parameters for which an animal is neither fed nor milked and fed. Concentrate food must be supplied in a time-rationed manner in D3, as it is in D11, so when a ration portion has been supplied there is implicitly a time period where an animal is neither fed nor milked and fed. This is likewise evidence of a third range of milking parameters as claimed.

Inventive step

If D3 does not disclose a third milking parameter range as claimed, reading D3 with D11, the skilled person would be prompted to introduce such a third range, particularly when considering the simple feeding units close to the milking parlour. They would therefore arrive at claim 1 as a matter of obviousness.

VIII. The respondent-proprietor argued as follows:

Sufficiency of disclosure

The number of milkings taking place after an individual animal has been milked, as claimed in granted claim 3, is an indication of time that has passed since an individual animal was milked. It can therefore be used as a milking parameter. The skilled person would know how to count milkings. The issue of sufficiency in respect of claim 3 was raised by the appellant very late, namely first in appeal, so it should be held inadmissible.

The skilled person could measure current milk yield for an animal, this is done anyway at milking time, so historic data would be available for estimating this. Milk yield at a given time is the integral of the linear secretion curve as E1 shows. This can also be used to estimate milk yield for a given time. Once this is estimated, suitable thresholds for defining ranges of milking parameters can be chosen.

Novelty, main request

D1 does not disclose the third range of milking parameters as claimed. In particular there is no direct and unambiguous disclosure of choosing one threshold for deciding when to stop supplying food at simple feeding stations and a different one for determining

when to start milking and feeding. Rather the same threshold is chosen so there is no third range of milking parameters disclosed in D1. Nor would rationing food at the simple feeding stations of D1 imply such a third range, since a visiting animal is first fed. Therefore, however food is rationed when available to a visiting animal at a station, the animal is always fed. Even if feeding is only for a short period, the time afterwards is not a disclosure of a third range as claimed, since the animal will have been fed when visiting that particular station. Rationing as in D11 is not the only way of distributing concentrate so it does not imply anything about the feeding regime of D1, nor would such a regime imply a third range of milking parameter as claimed, since it would be a rationing scheme independent of any milking parameter. Even if feed is no longer supplied at the milking station prior to the end of milking, this period is neither evidence of a separate range of milking parameter since it occurs during milking, nor is it a period when an animal is not milked as claimed.

The subject matter of claim 1 is new vis-à-vis D3. D3 does not disclose generating the value of a milking parameter, rather it only discloses assessing whether an animal should be milked or not. Furthermore, it does not disclose a third range of milking parameter as claimed. In D3 only the states "should be milked"/"should not be milked" are established. Although an animal may not be fed at some of the separate feeding stalls, this is always after its time for milking has begun, at which time it will be milked and fed if it visits the milking parlour. Therefore there is no disclosure of a third milking parameter range as claimed. Nor would any food rationing regime, such as the one disclosed in D11, prove a third range

of milking parameters, since this would only concern how food is administered. An animal visiting a particular station and being fed something is critical for the claim, not how long or in what quantity it is fed.

Inventive step

It would not be obvious to modify the method of D3 to arrive at the claimed invention. In D3 an animal is enticed with food to a milking station as quickly as possible and without discomfort. It would go against this teaching to deny food altogether so that it was neither fed nor milked and fed for a period. Nor would this be obvious from D11 which discloses only a rationing regime but no milking parameter or any relationship between feeding and milked.

Reasons for the Decision

1. The appeal is admissible
2. Background
 - 2.1 It is known to identify animals that need to be milked and to determine their admittance to a milking parlour on the basis of a time-dependent individual milking parameter (patent specification, paragraphs [0001] and [0002]). The patent relates to luring animals to present themselves at a robot milking parlour sufficiently often by means of a concentrate feeding station at the milking parlour. Further feeding stations supplement what they eat at the milking/feeding station (specification, paragraph [0003]).

2.2 Animals sometimes eat so much at the further feeding stations that they are no longer hungry enough to enter the milking/feeding station, so they are not milked often enough (specification, paragraph [0004]).

The patent proposes an admittance scheme linking further feeding station admittance criteria to admittance criteria for the milking/feeding station, so that the animals have enough to eat whilst visiting the milking parlour for milking sufficiently often (specification, paragraphs [0007] to [0009]).

3. Sufficiency of disclosure

3.1 Article 83 EPC requires that the European patent application shall disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. Sufficiency of disclosure must be assessed on the whole disclosure including description and claims. Furthermore substantially any embodiment of the invention as defined by the broadest claim must be capable of being realized. Thus all claims, dependent or independent, must meet the requirement of Art 83 EPC. See also Case Law of the Boards of Appeal of the EPO, 8th edition, 2016 (CLBA), II.C.2.

3.2 Claim 1 in all its versions defines the invention in terms of "an individual milking parameter". As already explained (see above point 2 and published specification, paragraph, [0002]) it is known to decide admittance to a milking parlour on the basis of a time-dependent individual milking parameter. Furthermore the patent gives three examples of suitable (time-dependent) individual milking parameters in paragraph

[1010]. These are, the number of milkings effected in the milking parlour since the last milking of the relevant animal (cf. claim 3 as granted), the period of time elapsed since the last milking of the relevant animal (cf. claim 6 as granted), and the current estimated milk yield of the relevant animal (cf. claim 9 as granted).

- 3.3 With respect to the second of these examples (time since last milking), it is not disputed that this is a known milking parameter for determining, inter alia, when to milk an individual animal, and thus discloses one way of carrying out the invention.
- 3.4 With respect to the first of these examples (number of milkings), it is not in dispute that the skilled person would be able to count milkings. This parameter will inevitably progressively increase with time, and thus to some extent be time dependent. It may well be that the rate of increase with time is non-linear, may vary from one milking cycle to another or with the size of the herd. However, since it will always increase with time, it is a way, however crude, of gauging time since an animal was last milked.
- 3.5 Regarding the third example above (current estimated milk yield), the Board considers it generally known how to measure milk yield when an animal is milked. Furthermore, whether or not milk yield varies linearly with time after last milking, as milk secretion appears substantial to do for a number of hours after milking (cf. E1, page 26, figure and E2, page 71, figure 3.1), an animal's milk yield will inevitably increase from the time the animal was last milked. Here too, the Board sees the estimated milk yield as a, perhaps

inaccurate, way of gauging time since an animal was milked.

It is conceivable that, as suggested by the respondent, an estimated milk yield can be derived by e.g. extrapolation from historical actual yield data recorded for an individual animal. Such individualized data is routinely collected in automatic milking systems. Moreover, the individual milking parameter chosen in claim 9 is an estimated milk yield, not an actual milk yield. Such an estimate, based for example on the assumption of yield increasing linearly with time, might deviate from a measured actual milk yield which may be influenced not only by secretion rates, but also by factors such as udder pressure and residual milk carry-over (see E2, page 70, first complete paragraph and page 74, figure 3.5). Nevertheless, it is but an estimate, however accurate or inaccurate. The Board holds that the skilled person would know how to make such an estimate, for example by extrapolation of historical milking yield measurements from the time of milking.

- 3.6 Thus both the embodiment of granted claim 3 (number of milkings since individual was last milked) and that of granted claim 9 (estimated milk yield) boil down to individual milking parameters indicating, somewhat inaccurately perhaps, the known individual milking parameter of time elapsed since last milking (cf. patent specification, column 2, lines 24 and 35 to 37).

Nor does the Board consider it beyond the routine ability of the skilled person to select threshold values based on these, and to calculate percentages thereof to define further thresholds, since in both cases the milking parameter can be expressed as a

numerical value (cf. patent specification, column 2, lines 30 to 34).

3.7 From the foregoing, the Board considers that the invention according to the embodiments of granted claims 3 and 9 (number of milkings and estimated milk yield respectively) would provide suitable milking parameters for carrying out the invention, both being related to the known parameter of time since last milking. Furthermore, the skilled person has the wherewithal, from the patent specification and their general knowledge, for generating the milking-parameter and associated threshold values.

3.8 Thus the arguments put forward by the appellant-opponent have not convinced the Board that the invention as claimed cannot be carried out across the whole range of the independent claim in all its versions, nor that the impugned decision was wrong in finding the invention as defined in granted claim 9 to be sufficiently disclosed (cf. impugned decision, reasons 2).

3.9 In view of this, the question of admissibility of the appellant-opponent's arguments regarding claim 3 (sufficiency of disclosure) is moot.

4. Novelty of claim 1 of the main request vis-à-vis D1, Article 54(3) EPC

4.1 Document D1 discloses a method of automatically feeding and milking animals (abstract, page 2, line 12 to page 3, line 18, claims 1 and 2, figure 1). The milking system is voluntary, so the animals can move around freely (page 3, lines 7 to 10, page 4, line 1, figure 1). They can visit a milking parlour 5', 5'' provided

with a milking robot 7 and feeding station 6 (page 4, lines 10 to 11), as well as separate feeding stalls 3', 3'' each provided with a further feeding station 4 (page 4, lines 4 to 6).

Each animal is identified when visiting a feeding station 3 or milking parlour 5 (page 4, lines 12 to 15), and has an individual milking parameter, namely time since last milking (page 1, lines 20 to 22, page 2, lines 18 to 19, page 5, lines 14 to 15).

Furthermore, the method of D1 foresees feeding and milking an identified animal at the milking parlour 5' if and only if the milking parameter is in a first range, e.g. actual time is after commencement of the optimum time for milking an individual animal (page 2, lines 27 to 29, page 6, lines 23 to 25). By the same token, the method foresees feeding the identified animal at the separate feeding stall 3, if and only if the milking parameter is in a second range, e.g. prior to the optimum time for milking the animal, therefore non overlapping with the first range (page 2, lines 16 to 22, page 5, lines 20 to 23).

- 4.2 Thus the question of novelty turns on whether or not D1 discloses directly and unambiguously that the first and second ranges are chosen so that they are not directly adjacent but separated by a third milking parameter range, in which an animal, when visiting the milking parlour, will not be milked (and thus also not milked and fed) and when visiting the separate feeding stall will not be fed.
- 4.3 The appellant-opponent has argued that D1 discloses such a third milking parameter range. The Board disagrees.

In the general description of what happens at the feeding stations (page 2, lines 16 to 25), D1 gives three example threshold times at which the further (simple) feeding stations stop supplying feed. These are an optimum time to milk after the last milking time, or a time shortly before this optimum time, or an average time between milkings.

In the sentence immediately following these examples (page 2, lines 21 to 22), D1 explains that, whichever one of these options is chosen, after this time (then) the animal will only be able to receive feed at the combined milking and feeding station. The paragraph goes on to explain that the animals soon learn that when the simple feeding stations stop dispensing feed, they have to go to a combined feeding and milking station, and that this encourages the animals to do so. If anything, the Board considers the paragraph points to making the feed/milking station available to visiting animals as soon as the simple feed stations cease making food available to them.

The following paragraph, said to be a "second embodiment" (page 2, line 27 to page 3, line 2) discloses that the combined milking/feeding stations only dispense feed to an individual animal after commencement of the optimum time for milking the individual animal. No information is given as to how the two "embodiments" relate or combine. In particular, there is no explicit statement that the second of the three example threshold times of the first embodiment to stop feeding at the simple feeding stations shortly before optimum milking time can be combined with the only mentioned threshold time (optimum milking time) from the second embodiment, to arrive at a third

intermediate range for the milking parameter, when food is available nowhere and the animal will not be milked.

Given however that the skilled person is presented with these as two separate embodiments and that, as explained above, the penultimate paragraph on page 2 suggests there should be no time during which animals are neither fed nor milked and fed, the Board holds that the idea of choosing different milking parameter threshold values from the two embodiments and combining them in a single embodiment, appears at the very least, not to be directly and unambiguously derivable from pages 2 and 3. In other words, it is ambiguous whether an intermediate third milking parameter range as claimed is disclosed in this part of D1.

- 4.4 Where the skilled person encounters ambiguities in the general description of the invention, they will look for answers in its detailed implementation (see page 4, line 1 to page 7, line 6 and figure 1).

There (see page 5, lines 3 to 7), for the case of simple feed stations turning off shortly before, that is at the approach of, the optimal time for milking, an animal can only receive food at the combined feeding and milking station. In more detail (page 5, lines 15 to 26) the computer calculates an optimal time window for milking, which may start an hour before the optimal time. If the actual time is before the start of this window, the simple feed stations dispense food to the visiting animal (page 5, lines 20 to 23). After the start of this window, milking "should take place" (page 5, lines 18 to 19). Thus the start of this window is the threshold time at which the system flips from feeding at the simple feeding stations 3', 3'' to milking and feeding at the milking parlour 5'. Put

differently, irrespective of whether this window should start at the ideal milking time or a short time before, rather than its start heralding the beginning of a third milking parameter range during which the animal is neither milked nor fed, the system flips directly to the second parameter range in which the animal is milked and fed at the milking parlour.

Thus the only detailed embodiment paints a consistent picture of a system having no third milking parameter range as claimed.

4.5 Nor is such a third range of milking parameter defined by food dispensing being stopped in the combined milking/feeding stations in anticipation of the end of the milking cycle (page 7, lines 1 to 6). When food is no longer supplied before the milking cycle ends, the animal, per definition, is still being milked. Consequently, even leaving aside the question as to whether the period is characterised by a range of milking parameters (the Board holds it is not since it is not a time after milking), the time when food is not dispensed but still milked can never be a third range as claimed, namely one in which an animal is not milked.

4.6 Moreover, even if D1 were to implicitly disclose rationing food in discrete doses at the simple feeding stations 3',3'', so that food may not be supplied continuously (page 5, lines 21 to 26, page 6, lines 10 to 12), the animal is still fed when it visits a feeding station, albeit perhaps not all the time and maybe only with an amount of food suitable for making it hungry when milking time arrives. In other words, as long as the optimum time window for milking has not commenced, the animal will always receive food (whether

portioned in discrete doses or meted out in a trickle) when it visits a further feeding station. Therefore, such a rationing regime does not result in a third range of a milking parameter in which an individual animal will not be fed when visiting a separate feeding stall, nor milked and fed at the milking parlour.

4.7 Lastly, even if a rationing scheme for feeding stations in which animals are fed large amounts of concentrates in few feeds is known from D11 (see pages vi, chapter 5, page 181, first complete paragraph, page 182, second paragraph, page 183, second paragraph and title of chapter), it cannot imply anything about the time dependency of the feeding scheme of D1. Firstly the time-based rationing scheme of D11 is not the only way of feeding an animal, it can also be trickle fed (D11, page 183, lines 6 to 11), or concentrate could, for example, be mixed in small proportions with normal feed (cf. D11, page 184, last paragraph), or feeding could simply be realized by allowing conditional access to feed without any limitation of amount. Secondly, whatever the concentrate rationing scheme of D11 might be, it can have no implications for the feeding scheme of D1 because D1 does not mention feeding concentrate, the only food D1 mentions is fodder, that is dry hay or straw (see D1 claims 1 and 8).

4.8 Thus, also taking into account the skilled person's general knowledge, D1 does not directly and unambiguously disclose a method having a third range of a milking parameter in which an animal will not be milked and fed when visiting a milking parlour, nor fed when visiting a separate feeding stall. Therefore D1 does not take away the novelty of claim 1.

5. Novelty vis-à-vis D3

D3 also describes a system with associated method of feeding and milking animals which are allowed to walk about freely (page 13, lines 29 to 31 and page 24, lines 1 to 26, figure 6A). A milking parlour is provided with milking robot 7 and feeder 4 (page 13, line 27 to page 14, line 9 and figure 2). The main idea of D3 is to entice animals in a desired direction, for example to approach the milking parlour, see abstract, using enticing means or devices. These may produce sounds such as the loudspeakers 30a-30g of figures 4A, 4B, page 18). Alternatively, the enticing devices may be feed supplying devices, see page 7, lines 25 to 28, described in greater detail in the embodiment of figures 6A and 6B, page 22, line 26, to page 25, line 9, with animals enticed using feed or water supplied at feeding stalls 40a to 40g.

5.1 D3 also discloses identifying animals visiting the milking parlour and feeding stations (page 17, lines 29 to 35, page 24, lines 28 to 31). Furthermore the Board sees D3 as disclosing determining a milking parameter for an animal, once it has been identified, in that its device determines that an animal "should be milked" or "should not be milked" (see for example page 6, lines 15 to 24, paragraph bridging pages 10 and 11, page 17, line 29 to page 18, line 17).

5.2 The Board notes that D3 does not explain how the system determines whether a cow should be milked or should not be milked. Whether the time since last milking plays a role, as it does in the prior art D3 discussion (paragraph bridging pages 1 and 2) is not disclosed. Factors such as udder condition and facts specific to the animal may play a role (page 17, line 29 to page 18, line 9). In any case, the resulting milking

parameter has one of two statuses (should be milked/should not be milked). By their very definition these are mutually exclusive and non-overlapping, the one being the complement of the other, and thus form two parameter ranges.

5.3 If the milking parameter value is in a first range (should be milked) the animal is either fed in small amounts or not at all in a further feeding stall (e.g. the most remote one 40a, page 24, lines 1 to 15), but when visiting the milking parlour M, will be milked and fed during milking (page 13, lines 29 to 31, page 18, lines 8 to 11, page 24, lines 10 to 15). If, and only if, the milking parameter value is determined to be in the second range (should not be milked) then the animal will be fed (at high intensity) in the further (remote) feeding stall (e.g. 40a, see page 24, lines 16 to 26), but not milked and fed at the milking parlour M (page 24, lines 17 to 26).

5.4 Thus the question of novelty of claim 1 vis-à-vis D3 turns on whether or not D3 discloses a third range of the milking parameter in which an animal visiting the milking parlour will not be milked (and therefore also not fed there, since this happens during milking), and, when visiting the separate feeding stall will not be fed.

However, in the above interpretation of D3's teaching the two mutually exclusive states or parameter values can be seen to form what is effectively a binary value set. Such a binary set of mutually exclusive values logically excludes the possibility of some third state or value: there can be no intermediate status between needing to be milked and not needing to be milked. In other words the Board considers that in the above

interpretation D3 does not disclose a third range of milking parameters as claimed. For this reason alone, the Board holds the subject matter of claim 1 to be new vis-à-vis D3.

5.5 The appellant-opponent has speculated that such a third range of milking parameter exists, in that animals will cease to be fed at outlying further feeding stations such as 40a, when it is nearly time for milking but before they can be fed and milked at the milking station M, thus allowing them time to arrive at the milking parlour at the correct time for milking. The Board disagrees.

5.5.1 Firstly, this presupposes that D3 discloses a milking parameter that could take on more than two values, in particular some time dependent value. However, other than the binary milking parameter set (should be/should not be milked) discussed above, the Board is unable to derive from D3 anything that could be regarded as an individual milking parameter for deciding whether an animal is milked and fed.

5.5.2 Secondly, in the Board's opinion, even it were to be assumed for the sake of argument that D3 discloses some form of time dependent parameter for deciding milking it does not disclose that when an animal ceases to be able to feed at the station 40a it can not already be milked and fed at the milking parlour M. It is true that when an animal needs milking, it must be enticed to the milking parlour. However, D3 see e.g. passage bridging pages 10 and 11 and page 23, last paragraph only describes enticing the animals towards the milking parlour with food or water, not starting to entice animals before they need milking.

D3 goes on to explain (page 24, lines 1 to 15 and figure 6A) that this enticement involves ceasing to supply food at the remote further feeding station 40a, but still making it available at further feeders close to the milking parlour M. This is repeated, until food is no longer available at any further feeding station except feeder 40g, located next to the milking parlour M.

The only information the skilled person has regarding whether or not, during this enticement process an animal visiting the milking station would be milked and fed is to be found on page 24, lines 11 to 15, namely in respect of the last phase of enticement. There it is said that feed will "of course", in other words certainly, be available at the milking parlour M. Far from disclosing that enticement (by withholding feed in feed stalls while offering feed in the milk parlour) should occur before an animal is allowed to enter the milking parlour for milking and feeding, D3 thus makes clear that, at least for this last phase of enticement, an animal being enticed there will certainly be fed at the milking parlour, the animal's destination.

Nothing in D3 suggests, let alone directly and unambiguously discloses, that this would not also be the case during the remainder of the enticement process, that is as soon as the outer feeding station 40a ceases to offer feed to a given animal, because the computer has decided it should be milked. On the contrary, whatever inducement is employed, the principle of the enticement arrangements of D3 is to move an animal to its milking parlour destination as quickly as possible *when it needs to be milked* (see page 2, lines 24 to 29, page 8, lines 21 to 26 and page 18, lines 27 to 31). Having the milking parlour M not

milk (nor offer food to) the animal when it needs milking would run contrary to D3's underlying idea of persuading an animal to visit the milking parlour as quickly as possible.

5.5.3 As regards the argument that D3 must necessarily relate to rationing the same reasoning given above for D1, sections 4.6 and 4.7 holds.

5.6 From all of the above, the Board concludes that D3 does not disclose a third milking parameter range as claimed and that therefore the subject matter of claim 1 is new with respect to D3.

6. Inventive step

6.1 Following on from the discussion of novelty, the subject matter of claim 1 differs from D3 in that first and second milking parameter ranges are chosen so that they are not directly adjacent but separated by a third range, within which, an animal visiting the milking parlour will not be milked and when visiting the separate feeding stall, will not be fed.

6.2 According to the patent (see specification, paragraph [0009]), this guarantees a sufficiently high visit frequency of the animal to the milking parlour, in other words it increases the reliability with which an animal can be persuaded to visit the milking parlour. Accordingly, the Board considers that the objective technical problem can be formulated as how to modify the method of D3 to ensure an animal visits the milking parlour more reliably.

6.3 Nothing in D3 suggests luring an animal to the milking parlour before it needs to be milked, as the appellant-

opponent argues the skilled person would do. D3 is concerned with how to rapidly lure an animal to a destination, such as a milking parlour, by enticing it, inter alia, with food. By the same token D3 is concerned with luring an animal rapidly away from a forbidden area, by enticing it to leave with the offer of food (see page 23, lines 26 to 30, page 24, lines 17 to 26).

The whole thrust of D3's teaching is thus to entice an animal to move quickly in a certain direction by offering it an incentive, inter alia, food.

6.4 Where the chosen destination is the milking parlour, the idea of enticing an animal there, but not milking and in particular feeding it would run counter-intuitive to the whole teaching of D3. This is because the enticing effect that has an animal moving in a certain direction with the promise of food, so central to the teaching of D3, would be lost. Therefore the skilled person would not, as a matter of obviousness, modify the arrangement of D3 to create conditions at which an animal was neither fed when visiting separate feeding stations nor milked and fed when visiting the milking parlour as claim 1 requires.

6.5 Nor would such an intermediate range result if the skilled person would use routine feed rationing (such as described in D11) when carrying out the teaching of D3. As explained above the only milking parameter set that the Board is able to identify in D3 is the binary set described above, which does not allow for an intermediate range. Thus, if the skilled person in carrying out D3's teaching adopts a routine rationing regime, such as for example in D11, he has not yet arrived at the claimed invention. That would require

the further step of finding a suitable milking parameter (time or number of cows since last milking, milk yield) and setting appropriate thresholds for that parameter. Finally, and most importantly, rationing may result in feed free periods between or after doses, this does still not constitute an intermediate range of a decision making parameter in the sense in which claim 1 must be understood, namely for values of which the system decides not to milk an animal if it is visiting the parlour and not to feed it if it is visiting a feeding stall.

7. In appeal, the appellant-opponent has challenged sufficiency of disclosure and novelty and inventive step of the patent according to the main request only with reference to documents D1, D3 and D11. No other objections have been put forward nor does the Board see any other compelling reason that might prejudice maintenance of the patent as amended. In particular claim 1 of the main request which combines granted claims 1 and 2 is in turn a straightforward combination of claims 1, 2 and 3 as filed, while consequential amendment has been made to the description (statement of invention). Thus the requirements of Article 123(2) and (3) EPC are also met.

Therefore, taking into account the amendments made to the patent according to the respondent's main request, including amendments made to the description during the oral proceedings of 6 October 2016, the Board finds that the patent and the invention to which it relates meet the requirements of the EPC, so that pursuant to Article 101 (3) (a) EPC, the patent can be maintained as amended. In view of this, the respondent-proprietor's auxiliary request need not be considered.

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 on the following basis:

Description:

Columns 1 and 2 as filed at the oral proceedings before the Board on 6 October 2016
column 3 of the published patent specification.

Claims

No. 1 to 11 of the main request, filed as auxiliary request 1 with letter dated 4 November 2011.

The Registrar:

The Chairman:



L. Malécot-Grob

A. de Vries

Decision electronically authenticated