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Datasheet for the decision of 4 November 2015

Case Number: T 2547/11 - 3.2.04

Application Number: 04075184.4

Publication Number: 1419689

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Language of the proceedings: EN

Title of invention:
An implement for automatically feeding animals

Patent Proprietor:
MAASLAND N.V.

Opponent:
DeLaval International AB
Intellectual Property & Legal Support

Headword:

Relevant legal provisions:
EPC Art. 84, 54, 56

Keyword:
Clarity of amendments - main request (yes)
Novelty and Inventive step - main request (yes)

Decisions cited:
G 0003/14

Catchword:

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Case Number: T 2547/11 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 4 November 2015

Appellant: (Opponent)	DeLaval International AB Intellectual Property & Legal Support P.O.Box 39 147 21 TUMBA (SE)
Representative:	Jennings, Michael John A.A. Thornton & Co. 10 Old Bailey London EC4M 7NG (GB)
Respondent: (Patent Proprietor)	MAASLAND N.V. Weverskade 110 3147 PA Maassluis (NL)
Representative:	Corten, Maurice Jean F.M. Octrooibureau Van der Lely N.V. Cornelis van der Lelylaan 1 3147 PB Maassluis (NL)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 11 October 2011 concerning maintenance of the European Patent No. 1419689 in amended form.**

Composition of the Board:

Chairman	A. de Vries
Members:	E. Frank
	T. Bokor

Summary of Facts and Submissions

I. The appeal lies from the decision of the opposition division, dated 09 May 2011 and posted on 11 October 2011, to maintain the European patent No. 1 419 689 in amended form pursuant to Article 101(3)(a) EPC. The appellant (opponent) filed a notice of appeal on 9 December 2011, paying the appeal fee on the same day. The statement of grounds of appeal was submitted on 10 February 2012.

II. The opposition was filed against the patent as a whole and based on Article 100(a) in conjunction with Articles 52(1), 54, and 56, Article 100(b) in conjunction with Article 83, and Article 100(c) in conjunction with Article 123(2) EPC.

The opposition division held that the second auxiliary request as filed with fax on 8 April 2011 met the requirements of the EPC. In its decision the division considered the following prior art, amongst others:

D1 = US-A-5 355 833
D2 = EP-A-0 628 244
D3 = US-A-5 074 248
D7 = US-A-5 778 820

III. A communication pursuant to Article 15(1) RPBA was issued after a summons to attend oral proceedings, which were duly held on 4 November 2015.

IV. The appellant requests that the decision under appeal be set aside and the patent be revoked.

The respondent requests that the appeal be dismissed, i.e. the patent be maintained in an amended form on the

basis of the claim set held allowable by the department of first instance (as main request), or that the decision under appeal be set aside and the patent be maintained in an amended form on the basis of any of the auxiliary requests 1 or 2 filed with letter dated 13 October 2015, or on the basis of auxiliary request 3 filed with response to the grounds of appeal dated 21 June 2012, and with a correspondingly adapted description.

V. The wording of claim 1 of the main request as found allowable by the opposition division reads as follows:

"An implement for automatically feeding animals, such as calves or cows, comprising
- means for attuning the amount of feed to the nutritive need of the individual animal,
- means for supplying the feed to the individual animal,

characterized in that the implement comprises

- a milking machine for yielding the milk or mother’s milk, and
- means for supplying the milk or mothers milk automatically, and directly from the milking machine to the individual animal,

said means comprising a transport system for liquids, a metering device and a feeding station for animals which is coupled to a milking machine, wherein the transport system is adapted to supply the milk or mothers milk from the milking machine directly to a metering device."

VI. As to the main request, the appellant argued as follows:

Clarity of amendments

Amended claim 1 is unclear, since "directly" now refers to a metering device on the one hand, and to an individual animal on the other hand. Moreover, the present description still contains various references (see e.g. par. 0009) to intermediate first or further storage means. Apart from additional storage means, other components such as valves can also be part of the direct milk supply line between the milking machine and the individual animal, cf. description, par. 0021 and fig. 1. Thus, the present description raises ambiguity about the meaning of claim 1, that is, whether or not an intermediate milk storage means can form part of a "direct" milk supply from the milking machine to the animal as well. Finally, if claim 1 were interpreted in that "direct supply" meant "without storage", then the dependent claims 6, 7, 12, 34, and 39 introduce lack of clarity. Thus, the main request contravenes Article 84 EPC.

Novelty and inventive step

D7 discloses a milking robot and a drinking bowl as components of a milking machine. There is necessarily a direct supply conduit from the machine to the drinking bowl, i.e. any pieces of pipe. Therefore claim 1 lacks novelty over D7.

As for inventive step, claim 1 differs from D1 in that a milking machine and means for supply between the machine and the feeding station 60 are foreseen. D1 relates to feeding young animals. D1 is concerned with

automatic milking and thus already solves the problem of manual milking, which is identified incorrectly in par. 0002 of the patent as being a problem to be solved. The objective technical problem vis-à-vis D1 must be reformulated as "how to integrate an efficient feeding system with a (generally known) milking machine". D3 also concerns young animals (piglets) and teaches a direct hook-up between sow and piglets by means of a milking machine and a pipe. This would lead the skilled person to adapt D1 accordingly, and to integrate a direct connecting supply line between a milking machine and the feeding station 60. This is all the more so, since the advantages of colostrum-bearing milk feeding is common general knowledge, as also recognized in D3, and also hinted at in D1, see col.2, lines 1-6. Furthermore, starting from D7, a connecting supply line is again suggested by D3 or common general knowledge, since there must be a direct supply of milk to D7's drinking bowl. The fully automated milking of D2 in combination with the feeding system of D1 finally would also lead to claim 1. Therefore, claim 1 of the main request lacks an inventive step in the light of D1 and D3, D7 and D3 (or common general knowledge), or D2 and D1.

VII. As to the main request, the respondent argued as follows:

Clarity of amendments

The issue of clarity of combined granted claims is not open to objection, see G 3/14. It is clear from both claim 1 and the present description that a "direct" milk supply from the milking machine to the individual animal cannot be interpreted as encompassing supply from intermediate milk storage means. The invention

according to claim 1 however does not exclude additional milk supply from intermediate storage means, as is required in some dependent claims. Therefore, the main request complies with Article 84 EPC.

Novelty and inventive step

Claim 1 is novel over D7, since D7 nowhere discloses that milk yielded by the system goes directly to the drinking bowl.

As regards inventive step, the problem to be solved with respect to D1 is indeed as stated in the patent at par. 0002, i.e. "how to avoid the labour of bringing milk to D1's tank". D1, see col. 2, is not related to feeding colostrum-bearing milk, let alone from a milking machine. On the contrary, in D1 the milk supplied from tank 50 is made from milk powder. Moreover, D1 relates to a computer automated feeding system, whereas D3 feeds the sow's milk directly but not in a controlled manner to a trough. D3 in any case does not provide a computerized metering system to feed a particular amount of feed to an individual animal. Starting from the automated feeding system of D1, the skilled person would firstly not look for feeding systems as in D3 that are for freshly born piglets. Secondly, even if he were to consider D3 and contemplated feeding colostrum (also based on his common general knowledge), he would not leave out D1's intermediate storage tank 50, as this is required in D1 for computer control of feeding. Starting from D7 the skilled person is unlikely to look toward D3 as D7 is concerned with dairy production which is even further away from piglet rearing as in D1. Nor would he draw on common general knowledge to provide a direct milk supply to the drinking bowl. As for the combination of D2 and D1, neither document

shows a direct connection between feeding machine and milking machine. Therefore, claim 1 of the main request involves an inventive step in the light of D1 and D3, D7 and D3 (or D7 and common general knowledge), or D2 and D1.

Reasons for the Decision

1. The appeal is admissible.

2. *Clarity of amendments - main request*

2.1 Claim 1 of the main request as upheld is a straightforward combination of the features of granted claims 1 and 13 but limited to a first alternative, viz. the automatic supply of the milk directly from the milking machine by means of a transport system to a metering device (the second alternative pertaining to supply via a storage means, has been deleted). Consequently, any lack of clarity raised against this combination does not arise from the amendment per se but would apply already to the claims as granted.

2.2 According to G 3/14 of 24 March 2015 (not yet published), see catchword, the "claims of the patent may be examined for compliance with the requirements of Article 84 EPC only when, and then only to the extent that the amendment introduces non-compliance with Article 84 EPC". As an amendment by combination of granted claims as in the present case does not introduce a non-compliance not already present in the granted claims, the Board, following G 3/14, has no power to examine the alleged lack of clarity.

2.3 As to the interpretation of claim 1 of the main request, the skilled reader using normal reading skills

and reading claim 1 against the backdrop of the description, readily understands the claim to pertain to milk or mother's milk being transported automatically and directly from the milking machine to a metering device, and hereby to the individual animal. In this reading "*the* milk" referred to in the "means for supplying *the* milk" can only reasonably refer to the milk yielded by the milking machine, i.e. the direct supply is of milk yielded by the machine.

This understanding of claim 1 is supported by the description, either of the patent as granted or as adapted in opposition to claim 1 of the main request. The two are essentially identical, other than necessary amendments to the statement of invention.

2.4 As to the understanding of "directly", this is not contradicted by the various components of the milk transport system such as analysis device 3, valves 5 and 6, or warming up element 9 shown in figure 1 and referred to in paragraph 0021 of the patent, as argued by the appellant. The Board concurs with the respondent that the description however consistently uses the term "direct" or "directly" to differentiate from an alternative supply in which milk is supplied to the metering device after first having been stored in intermediate first or further storage means. This is particularly clear from the paragraphs 0009, lines 31 to 35, 0021, lines 24 to 30, and 0023, lines 11 to 15 of the patent. These and other passages, which remain unchanged in the adapted description, thus consistently contrast "using storage" with "direct" supply of milk from the milking machine. The term "directly" in claim 1 is to be understood in this context.

2.5 Therefore, the Board holds that the present description of the main request indeed is in line with the interpretation of claim 1 and clearly supports the claimed alternative according to the main request, viz.:
that an implement of claim 1 must comprise a transport system to supply milk directly, i.e. without having been stored in a first or further storage means beforehand, from the milking machine to a metering device, thus to enable milk to be directly - likewise meaning without intermediate storage - supplied from the milking machine to the individual animal.

2.6 Finally, the patent specification nowhere describes an embodiment of a milk supply to a metering device from an intermediate storage only. Rather, the description is directed to implements encompassing both direct milk supply from a milking machine and indirect milk supply from first or further storage tanks, as is apparent from the sole embodiment shown in figure 1 showing a direct line of supply (reference signs 3,4,5,6,9,10), in addition to possible supply from storage 12 or 13. Hence, neither the subject-matter of claim 1 nor the present description of the main request exclude that the claimed implement may in addition also comprise a milk supply to the metering device from an intermediate storage means. Contrary to the appellant's view, therefore, the amendment by limiting of claim 1 of the main request to direct supply does not introduce a contradiction with dependent claims 6, 7, 12, 34, and 39 (otherwise unchanged) relating to such additional storage.

The main request thus complies with the requirements of Article 84 EPC.

3. *Novelty - main request*

3.1 Document D7, see abstract, describes an apparatus for automatically milking animals. A drinking bowl of the milking compartment may be supplied with milk, cf. D7, col.3, lines 64 to 67. The appellant argues that the drinking bowl 19 and the milking robot 6 shown in figure 1 of D7 are to be understood as components of the overall milking machine, which therefore necessarily supplies milk directly and automatically to the (automatic) drinking bowl. However, the Board follows the argument of the respondent, that D7's disclosure does not give any clue as to how or which milk is supplied to the drinking bowl 19 cf. D7, col. 3, line 64 to col.4, line 9, and col.6, lines 42 to 46. The source of the milk supplied is purely a matter of conjecture; in any case there is no indication or suggestion that it might be the milk yielded by the machine itself that is supplied to the drinking bowl. Therefore, D7 does not directly and unambiguously disclose a means for supplying the milk or mother's milk automatically and directly from the milking machine via a metering device to the individual animal as is required by claim 1 as understood above.

3.2 Since novelty of claim 1 over the remaining cited prior art is undisputed, the Board thus finds that the subject-matter of claim 1 of the main request fulfils the requirements of Article 54 EPC.

4. *Inventive step - main request*

4.1 It is common ground that document D1 concerns an automatic feeding apparatus for young animals such as calves, and thus can be considered a suitable starting point, cf. D1, abstract, col.1, lines 6 to 12, and 61

to 58; and figures 4, 6 and corresponding cols. 7 (lines 26 to 40) and 8 (lines 17 to 28). The appellant argues that D1 was wrongly assessed in paragraph 0002 of the patent in suit, since D1 is not concerned with manual milking. It would rather implicitly encompass automated milking in the form of a generally known milking machine as an ubiquitous feature of any farm where animals such as cows are fed and reared.

However, the Board agrees with the respondent that even if this were so, D1 in any case does not disclose or suggest that a milking machine which extracts milk from an animal forms part of D1's computer aided feeding equipment. Rather, its sole focus is automated feeding, which in summary involves each animal being credited with a quantity of feed at a station 60 and receiving its individual feed from a mixer/distributor 61 supplied with milk powder, water, whole milk from a milk tank 50 and various additives, see D1, figures 4 and 6, and col. 8, lines 17 to 28.

4.2 Therefore, the automatic feeding implement of claim 1 of the main request differs from that of D1 in that a milking machine for yielding the milk or mothers milk is foreseen, and in that means for supplying the milk automatically and directly from the milking machine via a metering device to the individual animal are foreseen, where these means also comprise the transporting means.

4.3 In terms of the D1 implement these differences correspond to the feeding station 60 (figure 6 of D1) being coupled to a milking machine for a direct supply of milk therefrom. This represents a simplification and reduction in effort vis-a-vis other conceivable sources such as mixing from milk powder or filling and

transporting containers. Therefore, in the Board's view the objective technical problem based on these distinguishing features vis-à-vis D1 can be seen as how to make the milk supply easier, and thus less labour-intensive. Cf. also the patent, paragraphs 0002 and 0003.

Thus formulated, this broadest possible problem in line with the well-established problem-solution-approach is considered more reasonable than that formulated by the appellant. The latter, namely "how to integrate an efficient feeding system with a milking machine", firstly points towards the claimed solution, since integrating might suggest connecting directly. Secondly, in the express mention of a milking machine the problem formulated by the appellant clearly includes an element of the solution, thereby anticipating the solution. According to established case law a proper formulation of the problem should avoid such typical hindsight pointers or elements of the solution and, therefore, the objective problem advanced by the appellant is not considered suitable by the Board.

4.4 Document D3, see abstract, concerns a pig farrowing apparatus which comprises a restraining crate for a sow. At one end of a farrowing crate 11 is located a delivery chamber 13 which allows piglets to be delivered from the sow in the farrowing crate. The exit of the delivery chamber 13 leads to an incubation chamber 18, and there is located a feeding apparatus 20. In one embodiment, milk may be taken from the sow's teats via milking cups 53. From the cups 53 the milk is drawn through a line 54 to the feeding apparatus 20, which supplies it to the teats 51 where the piglets can suckle, cf. D3, col. 3, lines 7 to 45 and figure 1.

4.5 Although D1 generally addresses young animals, the Board considers it questionable whether the skilled person, starting from automated feeding equipment featuring individual stations 60 (see D1, abstract) which each animal, particularly calves, lambs or kids (D1, col.1, line 13) can freely access, would realistically look toward a piglet rearing chamber as in D3 with its farrowing/incubator and confined space for rearing freshly born piglets, if he was faced with the problem of an easier milk supply for the purposes of D1.

4.6 However, the Board shares the respondent's view that, even if the skilled person were to take D3 into consideration, it is not clearly derivable from D3 how the milk is directly "drawn" from the sow through line 54 to the teats 51 for the piglets, and whether this arrangement is thus actually a milking machine that is suitable for the animal husbandry feed architecture. Moreover, the milk is firstly transported to the feeding apparatus 20 which in turn supplies it to a plurality of teats 51 (e.g. drawn by suckling), cf. D3, col. 3, lines 29 to 38. The exact role of the apparatus 20, whether it stores, processes and then meters, or directly passes the milk on, is unclear. Thus, as further argued by the respondent, the skilled person in any event cannot derive from D3 a direct milk supply from the sow to a respective piglet in a controlled manner, i.e. so that the milk is automatically and directly supplied via a (milk) metering device to the individual animal as required by claim 1. There is no indication in D3 that the sow's milk has to be individually and directly metered to each piglet.

4.7 Finally, D1 consistently teaches as its core concept to feed the individual young animal at a station 60 by means of a computer controlled mixer/distributor 61, which is supplied with milk powder, water, milk from a tank 50 and additives, cf. point 4.1 above. Contrary to the appellant's view, the skilled person does not read in col.2 of D1, lines 1 to 12, a hint or reference to the indisputably well-known beneficial practice of feeding colostrum to young animals immediately after birth: it is rather a general statement recognizing the fundamental importance of the mother's presence during initial growth, which D1 specifically addresses by continuous playback of the mother's voice. However, even assuming that based on the disclosure of D3 or common general knowledge the skilled person were to contemplate colostrum feeding, he would do so in keeping with D1's teaching by adding it to the milk tank 50 of D1, not by supplying it directly to a young animal at station 60, as that would not allow automatic control of individual feeding in accordance with D1, as argued by the respondent.

4.8 To conclude, starting from D1 and faced with the problem of easier milk supply, even if D3 or common general knowledge were considered, the skilled person would not be prompted to modify D1's core concept of an intermediate milk storage, thus to arrive, without hindsight, at a means for supplying the milk or mother's milk automatically and directly from a milking machine to the individual animal/metering device as required by claim 1 of the main request.

4.9 Furthermore, reference is also made to the assessment of the inventive step of claim 1 starting from D7 in the light of D3, or starting from D2 in the light of D1, which has also been advanced by the appellant.

However, these lines of argument are not considered convincing by the Board. D7, see point 3.1 above, is concerned with milking equipment for automatically milking animals such as cows, i.e. concerns the dairy industry. D3, on the other hand, is related to piglet rearing remote from dairy production. Thus, following the problem-solution-approach the skilled person would not turn to D3, if he was looking for an improved or easier milk supply by means of the milking robot 6 of D7, since D3 does not address conventional milking machines for a dairy cow. D2 (see abstract, col.1, lines 1 to 30) discloses an automated method of milking animals, wherein the milk obtained is collected in different storage containers according to quality and/ or composition. Thus, neither D2 nor D1 disclose or hint at connecting a milking machine to a feeding station for a direct supply from the machine to the individual animal/metering device.

4.10 Therefore, the subject-matter of claim 1 of the main request involves an inventive step in the light of the cited art and thus also complies with the requirements of Article 56 EPC.

5. No further objections have been raised nor are any apparent to the Board. In particular, the amendments to the claims and consequential amendments to the description of the main request have a clear basis in the original disclosure, Article 123(2) EPC. The Board therefore finds, that taking into consideration the amendments made by the proprietor-respondent, the patent and the invention to which it relates meet the requirements of the EPC, and that therefore the patent according to the main request can be maintained as amended pursuant to Article 101(3)(a) EPC.

6. Since the main request has been found allowable, there is no need for the Board to consider the first to third auxiliary requests.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Magouliotis A. de Vries

Decision electronically authenticated