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Datasheet for the decision of 13 April 2018

Case Number: T 2058/14 - 3.3.09

Application Number: 07710036.0

Publication Number: 1978823

IPC: A23K1/18, A23K1/16

Language of the proceedings: EN

Title of invention:
COMPOSITIONS AND METHOD FOR PROMOTING FAT LOSS

Patent Proprietor:
Hill's Pet Nutrition, Inc.

Opponent:
The IAMS Company

Headword:

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no)

Decisions cited:

Catchword:

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Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 2058/14 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 13 April 2018

Appellant: (Patent Proprietor)	Hill's Pet Nutrition, Inc. 400 Southwest 8th Avenue Topeka, KS 66603 (US)
Representative:	Daniels, Jeffrey Nicholas Page White & Farrer Bedford House John Street London WC1N 2BF (GB)
Respondent: (Opponent)	The IAMS Company 8060 South-Mason-Montgomery Road Mason OH 45040 (US)
Representative:	Zimmermann & Partner Patentanwälte mbB Postfach 330 920 80069 München (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 14 August 2014 revoking European patent No. 1978823 pursuant to Article 101(3)(b) EPC**

Composition of the Board:

Chairman	W. Sieber
Members:	M. O. Müller
	E. Kossonakou

Summary of Facts and Submissions

I. This decision concerns the appeal filed by the proprietor of European patent No. 1 978 823 against the decision of the opposition division to revoke it.

II. With the notice of opposition the opponent had requested revocation of the patent in its entirety on the grounds under Article 100(a) (lack of novelty and inventive step), 100(b) and 100(c) EPC.

The documents submitted during the opposition proceedings included:

D5: US 2005/0249781 A1;

D7: D. Alomar et al., Journal of Animal Physiology and Animal Nutrition, volume 90, 2006, pages 223 to 229;

D8: Abstract of JP 2005-040059 (Patent Abstracts Of Japan, in English) and JP 2005-040059 (in Japanese); and

D11: M. Diez et al., J. Nutr., volume 132, 2002, pages 1685S to 1687S.

III. The opposition division's decision may be summarised as follows:

The main request (not relevant to the present decision) was not considered to be allowable, since its claim 9 was not based on the application as filed.

Claim 1 of the first auxiliary request read as follows:

"1. A composition for use in promoting fat loss in an obese adult canine animal wherein the composition comprises a total lysine to metabolizable energy ratio of from 6 to 10 g/Mcal."

The opposition division rejected this request since its subject-matter lacked an inventive step. The claimed subject-matter differed from the closest prior-art documents D5 and D8 in that the lysine to metabolizable energy ratio was specified as being in the range of 6 to 10 g/Mcal. No significant improvement within the claimed range compared to the area outside of this range had been demonstrated, so the objective technical problem was to provide an alternative composition for promoting fat loss in obese dogs. The selection of the lysine to metabolizable energy ratio as claimed was not purposive and represented merely a modification within the routine work of the skilled person.

Claim 1 of the second and third auxiliary requests read as follows (amendments with regard to claim 1 of the first auxiliary request highlighted by the board):

"1. A composition for use in promoting fat loss in an obese adult canine animal wherein the composition comprises a total lysine to metabolizable energy ratio of from 6 to 10 g/Mcal, and leucine in a total leucine to total lysine ratio of from 0.9 to 2.2." (second auxiliary request)

"1. A composition for use in promoting fat loss in an obese adult canine animal wherein the composition comprises a total lysine to

metabolizable energy ratio of from 6 to 10 g/Mcal, and wherein the composition comprises arginine, leucine, isoleucine, and valine in a total arginine plus leucine plus isoleucine plus valine to total lysine ratio of from 3 to 6."

The subject-matter as claimed in the second and third auxiliary requests lacked inventive step in view of D5 or D8 as the closest prior art. The additional distinguishing features of the leucine to lysine ratio (second auxiliary request) and of the arginine plus leucine plus isoleucine plus valine to lysine ratio (third auxiliary request) did not lead to any effect, so the objective technical problem was still the provision of an alternative composition for promoting fat loss in obese dogs. The selection of the ratios as claimed was within the routine work of the skilled person and thus could not contribute to inventive step.

IV. This decision was appealed by the patent proprietor (hereinafter: the appellant). The statement setting out the grounds of appeal (letter dated 16 December 2014) contained a main request and first and second auxiliary requests. These requests correspond to the first to third auxiliary requests before the opposition division (see point III above).

V. After the response of the opponent (hereinafter: the respondent), the board summoned to oral proceedings and communicated its preliminary opinion to the parties. It observed *inter alia* that D5 or D8 constituted the closest prior art, that these documents did not disclose the ratio of total lysine to metabolizable energy as claimed, that no effect had been shown to be linked to this ratio and that thus the objective technical problem was the provision of an alternative

composition for use in promoting fat loss in obese adult animals. It thus had to be discussed during the oral proceedings whether the claimed solution was obvious in view of this problem.

VI. By letter dated 12 March 2018, the appellant withdrew its request for oral proceedings and announced that it would not attend the oral proceedings.

VII. On 13 April 2018, oral proceedings took place before the board in the appellant's absence.

VIII. In as far as they are relevant to the present decision, the appellant's written arguments may be summarised as follows:

The subject-matter of claim 1 of the main request was inventive. The closest prior-art document D5 did not disclose or suggest a value for the metabolizable energy of the composition, let alone that the composition should have a particular ratio of lysine to metabolizable energy. The objective technical problem was the provision of an alternative composition for use in promoting fat loss in obese adult canine animals. In order to solve this problem, the skilled person had to take several steps, namely to select firstly dogs from the list of possible animals disclosed in D5, secondly an anti-obesity composition and lastly a ratio of lysine to metabolizable energy as required by claim 1, from which D5 in fact taught away.

The subject-matter of claim 1 of the first auxiliary request too was inventive over D5. The skilled person had even to take a further step, namely to add leucine in a specific ratio of leucine to lysine, for which there was absolutely no motivation in D5.

The same applied to the second auxiliary request. To arrive at the subject-matter of claim 1 of this request, the skilled person would have to take several additional steps, namely to add arginine, leucine, isoleucine and valine and to select their amounts such that the ratio of the sum of these amino acids to lysine was from 3 to 6. There was no motivation in D5 to add these four additional amino acids in the specific ratio recited in claim 1.

IX. In as far as they are relevant to the present decision, the respondent's arguments as presented in the written and oral proceedings may be summarised as follows:

The subject-matter of claim 1 of the main request lacked inventive step over the closest prior art D5. The skilled person looking for an alternative composition for promoting fat loss in obese adult canine animals would have no difficulty in understanding that the teaching of D5 applied to dogs. Furthermore, the selection of the claimed ratio of lysine to metabolizable energy had not been shown to be a purposive selection that could impart inventiveness to the claimed composition.

The subject-matter of claim 1 of the first auxiliary request too lacked an inventive step. Neither the specific ratio of lysine to metabolizable energy nor the ratio of leucine to lysine was associated with any technical effect; they merely represented routine work for the skilled person. These ratios therefore did not impart inventiveness to the claimed composition.

Lastly, the subject-matter of claim 1 of the second auxiliary request lacked inventive step over D5. The

addition of the four additional amino acids, arginine, leucine, isoleucine and valine, was not shown to be associated with any technical effect, and it merely represented routine work for the skilled person.

X. The appellant requested in writing that the decision under appeal be set aside and that the patent be maintained on the basis of the claims of the main request or either of the first and second auxiliary requests, all requests as filed with the statement setting out the grounds of appeal dated 16 December 2014.

XI. The respondent requested that the appeal be dismissed.

Reasons for the Decision

Main request

1. Inventive step

1.1 The opposed patent relates to diets for promoting fat loss in adult animals (paragraph [0001]).

In the same way D5 relates to eliminating fat in obese animals (paragraph [0006]). Therefore in line with the arguments of both parties, D5 can be considered to represent the closest prior art.

1.2 D5 discloses feeding stuff that is useful for eliminating fat in obese animals (paragraphs [0001] and [0006]). Target subjects are humans or pets, such as dogs, cats, rabbits, ferrets, hamsters or birds, zoo animals or livestock such as horses, cows, sheep, pigs or birds (paragraph [0017]).

In experimental example 1, D5 discloses an experiment in which five-week-old mice were fed for 16 weeks with a high-fat diet until they were obese. These mice were then divided into three groups, of which one was fed a control diet without any lysine supplementation and the other two were fed diets supplemented by 1% and 3% lysine. It was found that lysine supplementation led to a significant decrease in body weight and total fat weight that was dose-dependent on the lysine components, showing that the lysine-supplemented formula possessed an anti-obesity action (paragraph [0028]). D5 thus discloses a lysine-supplemented composition for use in promoting fat loss in an obese adult animal as required by claim 1.

D5 does not disclose the ratio of total lysine to metabolizable energy present in the lysine-supplemented diets. The subject-matter of claim 1 thus differs from experimental example 1 of D5 in that the animal is a dog (canine) rather than a mouse, and in that the total lysine to metabolizable energy ratio must be 6 to 10 g/Mcal.

1.3 The problem solved by the first distinguishing feature, i.e. the selection of dogs instead of mice, is the use of the claimed composition in alternative animals. The solution to this problem, i.e. use in dogs, is known from D5 itself (see point 1.2 above). Hence, use in dogs cannot support any inventive step.

1.4 As regards the second distinguishing feature, i.e. the claimed lysine to metabolizable energy ratio, the appellant has not shown that selecting such a ratio leads to any unexpected technical effect. On the contrary, it acknowledged that the results in the patent did not demonstrate an improvement in promoting

fat loss over the composition of the prior art (first paragraph on page 3 of the statement of grounds of appeal). As set out in the board's preliminary opinion, the objective technical problem solved by this distinguishing feature is therefore the provision of an alternative composition for use in promoting fat loss in obese adult animals.

In the absence of any effect, the variation of the lysine to metabolizable energy ratio is arbitrary. Such an arbitrary variation belongs to the routine experimentation of the skilled person and thus cannot support inventive step either.

1.5 The appellant argued that D5 taught away from the claimed subject-matter. Rather than disclosing a composition with a particular metabolizable energy content, D5 taught that it was the protein content which was important in combination with a particular amount of lysine.

The board does not share this view. D5 is simply silent about the total lysine to metabolizable energy ratio, but that does not mean that it teaches away from the claimed ratio.

1.6 The appellant further argued that D5 disclosed two types of composition, namely an anti-obesity composition, which promoted fat loss, and an anti-hyperlipidemic composition. Thus in order to arrive at the subject-matter of claim 1, a further selection, namely that of an anti-obesity composition, was necessary.

However, experimental example 1 of D5 discloses a decrease in fat weight and thus already refers to an

anti-obesity composition. Hence, starting from this experimental example, no such further selection is needed.

1.7 Therefore the subject-matter of claim 1 of the main request lacks inventive step over D5 alone.

First auxiliary request

2. Inventive step

2.1 Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the claimed composition comprises leucine in a total leucine to total lysine ratio from 0.9 to 2.2.

2.2 This leucine to lysine ratio is an additional distinguishing feature in view of the closest prior art D5. In the same way as for the lysine to metabolizable energy ratio, no effect has been shown to be linked to this additional distinguishing feature. The objective technical problem therefore remains the provision of an alternative composition for promoting fat loss in an obese adult animal.

2.3 As set out by the respondent, leucine is an amino acid typically present in dog food. This is confirmed by the fact that it is contained in the dog food of D7 (table 1) as well as in dog food A used as control diet in the opposed patent (table 1). The addition of leucine to the food disclosed in D5 is therefore a routine measure that does not contribute to inventive step.

2.4 Furthermore, in the same way as for the lysine to metabolizable energy ratio, the arbitrary variation of

the leucine to lysine ratio is within the routine activities of the skilled person and thus does not contribute to inventive step either.

2.5 Therefore, the subject-matter of claim 1 of the first auxiliary request too lacks inventive step over D5.

Second auxiliary request

3. Inventive step

3.1 Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the claimed composition comprises arginine, leucine, isoleucine and valine in a total arginine plus leucine plus isoleucine plus valine to total lysine ratio of from 3 to 6.

3.2 The presence of arginine, leucine, isoleucine and valine and their ratio to the total lysine content constitute an additional distinguishing feature in view of the closest prior art D5.

3.3 In the same way as for the lysine to metabolizable energy ratio, no effect linked to this additional distinguishing feature has been shown. The objective technical problem therefore remains the provision of an alternative composition for promoting fat loss in an obese adult animal.

3.4 As set out by the respondent, arginine, leucine, isoleucine and valine are amino acids typically present in dog food. This is again confirmed by the fact that these amino acids are contained in the dog food of D7 (table 1) as well as in dog food A used as control diet in the opposed patent (table 1). The addition of these

amino acids to the food disclosed in D5 therefore does not contribute to inventive step.

3.5 Furthermore, in the same way as for the lysine to metabolizable energy ratio, the arbitrary variation of the arginine plus leucine plus isoleucine plus valine to lysine ratio is within the routine activities of the skilled person and thus does not contribute to inventive step.

3.6 Therefore, the subject-matter of claim 1 of the second auxiliary request lacks inventive step over D5.

4. Consequently, neither the main request nor any of the auxiliary requests is allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Cañueto Carbajo W. Sieber

Decision electronically authenticated