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**Datasheet for the decision  
of 5 March 2013**

**Case Number:** T 1039/09 - 3.3.04

**Application Number:** 03741684.9

**Publication Number:** 1538897

**IPC:** A01K 67/00, C07K 14/47,  
C12Q 1/68

**Language of the proceedings:** EN

**Title of invention:**  
Method for altering fatty acid composition of milk

**Applicant:**  
A2 Corporation Limited

**Headword:**  
Milk/ A2 CORPORATION LIMITED

**Relevant legal provisions:**  
EPC Art. 54  
RPBA Art. 13(1)

**Keyword:**  
"Main request - novelty (no)"  
"Auxiliary requests 1 to 9 - novelty (no)"

**Decisions cited:**  
G 0002/88, G 0001/92, T 0848/93, T 0910/98, T 1092/01,  
T 1343/04, T 1179/07, T 0304/08, T 2215/08

**Catchword:**  
-



Case Number: T 1039/09 - 3.3.04

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.04  
of 5 March 2013

**Appellant:** A2 Corporation Limited  
(Applicant) Level 5, 235 Broadway  
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Auckland (NZ)

**Representative:** Drysdale, Douglas Standen  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 10 October 2008  
refusing European patent application  
No. 03741684.9 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman:** C. Rennie-Smith  
**Members:** R. Morawetz  
B. Claes

## Summary of Facts and Submissions

- I. The appeal of the applicant (hereafter "appellant") lies against the decision of the examining division to refuse European application No. 03741684.9, published as WO 2004/004450.
- II. The impugned decision was based on a sole request which was held to fail the requirements of Article 54 EPC in view of document US2002/0007497 (document (D1)). Claim 1 of the sole request before the examining division read as follows:

*"1. A method of producing bovine milk comprising the steps of:*

*(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline residue at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk  $\beta$ -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding  $\beta$ -casein having a proline residue at position 67, or by testing milk produced by individual cows of the herd (or a product produced from the milk) for the presence of  $\beta$ -casein having a proline at position 67;*

*(b) selecting the cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67, or that produce milk containing only  $\beta$ -casein having a proline at position 67; and*

*(c) milking only the selected cows to give milk; characterised in that:*

*(d) the milk produced by the selected cows comprises reduced levels of saturated fatty acids relative to the*

*level of unsaturated fatty acids, compared with milk obtained from a herd comprising selected and non-selected cows."*

- III. In its statement of grounds of appeal the appellant provided arguments why the set of claims underlying the decision under appeal was novel over document (D1).
- IV. The board issued a summons to oral proceedings on 19 December 2012. In a communication pursuant to Article 15(1) RPBA the board expressed its preliminary opinion that the subject-matter of claim 1 of the main request was novel over document (D1) but lacked novelty over WO 96/14577 (document (D3)), a document which belongs to the same patent family as US 6451368 (i.e. document (D2) in the examination proceedings) and which was introduced in the appeal proceedings by the board.
- V. In response the appellant filed with a letter dated 8 February 2013 a new main request and auxiliary requests 1 to 9.

Claim 1 of the **new main request** reads as follows:

*"1. A method for the purpose of producing bovine milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids by:*

*(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by genotyping and/or*

*phenotyping bovine cows on the basis of the amino acid located at position 67;*

*(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and*

*(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd."*

Claim 1 of **auxiliary request 1** reads as follows:

*"1. A method for the purpose of producing bovine milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids by:*

*(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding  $\beta$ -casein having a proline residue at position 67 or by testing milk produced by individual cows of the herd, or a product produced from that milk, for the presence of  $\beta$ -casein having a proline at position 67;*

*(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce*

*milk containing only  $\beta$ -casein having a proline at position 67; and*

*(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd."*

Claim 1 of **auxiliary request 2** reads as follows:

*"1. A method of reducing the level of saturated fatty acids relative to the level of unsaturated fatty acids in bovine milk by:*

*(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by genotyping and/or phenotyping bovine cows on the basis of the amino acid located at position 67 of  $\beta$ -casein;*

*(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having only a proline at position 67; and*

*(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd."*

Claim 1 of **auxiliary request 3** reads as follows:

"1. A method of reducing the level of saturated fatty acids relative to the level of unsaturated fatty acids in bovine milk by:

(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding  $\beta$ -casein having a proline residue at position 67 or by testing milk produced by individual cows of the herd, or a product produced from that milk, for the presence of  $\beta$ -casein having a proline at position 67;

(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and

(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd comprising selected and non-selected cows."

Claim 1 of **auxiliary request 4** reads as follows:

"1. A method for producing bovine milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids by:

(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by genotyping and/or phenotyping bovine cows on the basis of the amino acid located at position 67;

(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and

(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd."

Claim 1 of **auxiliary request 5** reads as follows:

"1. A method for producing bovine milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids by:

(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding  $\beta$ -casein having a proline residue at position



67 or by testing milk produced by individual cows of the herd, or a product produced from that milk, for the presence of  $\beta$ -casein having a proline at position 67;

(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and

(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd."

Claim 1 of **auxiliary request 6** reads as follows:

"1. Use of a method comprising the steps:

(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by genotyping and/or phenotyping bovine cows on the basis of the amino acid located at position 67;

(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and

(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the

*level of unsaturated fatty acids compared with milk obtained from the herd,*

*to reduce the level of unsaturated fatty acids relative to the level of unsaturated fatty acids in bovine milk."*

Claim 1 of **auxiliary request 7** reads as follows:

*"1. Use of a method comprising the steps:*

*(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding  $\beta$ -casein having a proline residue at position 67 or by testing milk produced by individual cows of the herd, or a product produced from that milk, for the presence of  $\beta$ -casein having a proline at position 67;*

*(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and*

*(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd,*

*to reduce the level of unsaturated fatty acids relative to the level of unsaturated fatty acids in bovine milk."*

Claim 1 of **auxiliary request 8** reads as follows:

*"1. A method of reducing the level of saturated fatty acids relative to the level of unsaturated fatty acids in bovine milk by:*

*(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding  $\beta$ -casein having a proline residue at position 67 or by testing milk produced by individual cows of the herd, or a product produced from that milk, for the presence of  $\beta$ -casein having a proline at position 67;*

*(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and*

*(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd."*

Claim 1 of **auxiliary request 9** reads as follows:

"1. A method of producing bovine milk comprising the steps of:

(a) determining which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67, where the herd comprises cows that produce milk containing  $\beta$ -casein having a proline at position 67 and cows that produce milk containing  $\beta$ -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding  $\beta$ -casein having a proline residue at position 67 or by testing milk produced by individual cows of the herd, or a product produced from that milk, for the presence of  $\beta$ -casein having a proline at position 67;

(b) selecting cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67; and

(c) milking only the selected cows to give milk;

characterised in that:

(d) the milk produced by the selected cows comprises reduced levels of saturated fatty acids relative to the level of unsaturated fatty acids, compared with milk obtained from the herd."

VI. Oral proceedings before the board were held on 5 March 2013. In relation to the main request the board pointed out that according to decision G 2/88 (see point 2.5 of

the reasons) the technical features of a claim directed to a process are its physical steps and that, in the present case, the physical steps of the claimed process were the same as those disclosed in the prior art. Further, the product obtained by the claimed process, i.e. the milk, was indistinguishable from the milk obtained in the prior art and its composition was also made available by document (D3) pursuant to decision G 1/92 (Headnote 1) and could thus not confer novelty on the subject-matter of claim 1. The board pointed to points 15, 18, 20 and 21 of the reasons in decision T 1092/01 and noted that the then competent board denied novelty of the process in that case too. The board also referred to decisions T 1343/04, T 1179/07 and T 304/08 which had held that the purpose is not a functional technical feature of a process claim directed to the production of a product. After the board announced its opinion on the main request, the appellant limited its further submissions to auxiliary requests 6 and 7. In relation to these requests the board remarked that the physical steps of the method claimed and the product obtained by the process were still the same as in the prior art and that no new effect could be ascertained.

VII. The arguments of the appellant may be summarised as follows:

*Main request - claim 1 - Novelty (Article 54 EPC)*

Claim 1 has been amended to specify more clearly the purpose of the method. The issue of novelty was essentially the same for all requests, despite the fact that the wording of the claims was slightly different

in each request. The application was directed to a method with the specific and restricted purpose of obtaining milk with lower saturated fat content than that of normal milk. This technical effect was achieved by selecting cows which produce only  $\beta$ -casein with proline at position 67. Document (D3) discussed methods for selecting cows based upon their  $\beta$ -casein genotype or phenotype. However the method described in document (D3) was not performed with the purpose of reducing the saturated fatty acid content of milk. The present claims included the specific technical limitation that the method was performed for a specific purpose, i.e. the purpose of reducing the saturated fatty acid content of milk.

It was established case law, see decision T 848/93, that a method claim was limited by the purpose of the method. The fact that the method described in document (D3) was potentially suitable for the production of milk with lower saturated fat content was not relevant to the assessment of novelty of a method claim.

The method disclosed in document (D3) resulted in the same milk but this document was silent on the fatty acid content of milk, this was not part of its information content. Following the reasoning of decision G 2/88 (point 10 of the reasons), the fact that a technical effect would have inherently taken place in the course of carrying out the method of document (D3) was not relevant to the novelty of the subject-matter of claim 1. In line with decision G 2/88 the purpose limitation was a technical feature providing novelty. Decision G 1/92 was not applicable

to the present case because here a method and not the product was claimed.

In decision T 1092/01, the present board had noted that it was the information content of any prior art document that was critical, and not what might inherently have occurred if a method described in the prior art was carried out (point 14 of the reasons). In decision T 1092/01 it had also been held that the rationale of decision G 2/88 also applied to method claims (point 17 of the reasons). Decision G 2/88 made it clear that one had to concentrate on what was actually "made available" by a prior art document. In the present case, although saturated fatty acid levels would have been reduced when the selection method was applied in the methods of document (D3), this was completely unrecognised and was in no way discernable by the skilled person from the teachings of document (D3) and was therefore not disclosed in the sense of Article 54(2) EPC. In the present case the new effect was the reduction of saturated fatty acid levels, and this opened up a completely new use of the method. In the light of the technical contribution of the present invention it was now possible to use the known method of selecting cows on the basis of  $\beta$ -casein variant for a completely new activity, i.e. producing milk with lower levels of saturated fat.

Although the milk was not different, in the light of the present invention new and commercially significant uses for that milk had emerged. The fatty acid composition could be analysed and quantified very simply using standard chemical tests and was a readily identifiable property.

*Auxiliary requests 1 to 5 and 8 - claim 1 - Novelty  
(Article 54 EPC)*

The wording of the claims was slightly different in each of these requests but the same arguments as brought forward for the main request applied also for these requests.

*Auxiliary requests 6 and 7 - claim 1 - Novelty (Article 54 EPC)*

In auxiliary requests 6 and 7 the claims had been amended to the form "use of method X for purpose Y". Such a form mirrored closely the form "use of composition X for purpose Y" that was specifically approved in decision G 2/88 in respect of a novel use of a method. By shifting to "use of method for a purpose claims" the purpose should therefore be limiting.

*Auxiliary request 9 - claim 1 - Novelty (Article 54 EPC)*

This request corresponded to the claims filed with the statement of grounds of appeal, with minor amendments to address objections raised in the preliminary opinion of the board. The claims were directed to the production of milk having reduced levels of saturated fatty acids relative to the level of unsaturated fatty acids that provided for potential new applications for the milk product. Such new applications included, for example, those that exploit the physical attributes associated with a milk fat product, such as melting point and "spreadability", as well as those relating to



the plethora of health conditions linked to saturated fat consumption. The claims presented new technical information to the skilled person and therefore the claimed subject-matter was novel.

VIII. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the main request or any of the auxiliary requests 1 to 9.

### **Reasons for the Decision**

#### *Admissibility of the main request and of auxiliary requests 1 to 9*

1. These requests were filed on 8 February 2013 in reply to the board's communication pursuant to Article 15(1) RPBA (cf sections IV and V, *supra*). These requests are a direct response to the objections raised by the board in its communication. Accordingly, the board decides to admit these requests in the proceedings in the exercise of its discretion under Article 13(1) RPBA.

#### *Main request - claim 1 - Novelty (Article 54 EPC)*

2. Claim 1 is directed to a method for the purpose of producing bovine milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids.

3. According to established case law of the Boards of Appeal (Case Law of the Boards of Appeal, 6th edition 2010, section I.C.5.3.1) a claimed invention lacks

novelty unless it includes at least one essential technical feature which distinguishes it from the state of the art. Therefore, when deciding upon the novelty of the subject-matter of claim 1, its technical features have to be determined first.

4. In accordance with decision G 2/88 of the Enlarged Board of Appeal (OJ EPO 1990, 93, see point 2.5 of the reasons), the technical features of a claim directed to a physical activity (e.g. method, process, use) are the physical steps which define such activity. The method of claim 1 comprises three steps (a) to (c), see section V, *supra*, as follows: in step (a) cows are geno- or phenotyped on the basis of the amino acid located at position 67 of  $\beta$ -casein to determine which cows of a herd produce milk containing only  $\beta$ -casein having a proline at position 67; in step (b) the cows that have DNA encoding only  $\beta$ -casein having a proline residue at position 67 or that produce milk containing only  $\beta$ -casein having a proline at position 67 are selected and in step (c) the selected cows are milked.
  
5. Document (D3) discloses (see Example 7) a method for producing milk which comprises identification of cows homozygous for the  $\beta$ -casein variant A1 and A2 genes ( $\beta$ -casein A1A1 and A2A2 phenotype cows) by polyacrylamide gel electrophoresis (PAGE) of milk samples from individual cows which corresponds to step (a) of claim 1. From a total of 3183 cows located on 25 large farms in the Manawatu and Waikato regions of New Zealand, approximately 400 cows were selected and placed on a single farm as a mixed herd such that the  $\beta$ -casein A1A1 and A2A2 phenotype cows in this herd were subjected to identical farm management and feeding

practices which corresponds to step (b) of claim 1. Finally, milk supplied from either  $\beta$ -casein A1A1 or A2A2 phenotype cows was collected separately, in accordance with step (c) of claim 1. Document (D3) also discloses (see claims 1-9) a method of producing bovine milk comprising the steps of testing milk from identified cows for the presence of variants of  $\beta$ -casein (which corresponds to step (a) of claim 1) and selecting those cows whose milk contains the A2 (or A3, D or E) variant and does not contain any A1 variant (which corresponds to step (b) of claim 1), and milking separately the A2 variant milk producing cows and recovering and maintaining their milk separately from milk from any other source (which corresponds to step (c) of claim 1). The  $\beta$ -casein A2, A3, D and E variants contain a proline at position 67 whereas in the  $\beta$ -casein variants A1, B, C and F proline-67 is substituted by a histidine (see page 13, lines 24 to 27). Accordingly document (D3) discloses methods of producing milk which comprise the three physical steps (a) to (c) specified in present claim 1.

6. That the physical steps of the claimed method are the same as in the prior art is not disputed by the appellant. However it was submitted that in the present case the purpose of the method, namely producing bovine milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids, was also a technical feature to be taken into account in the assessment of the novelty of claim 1.

7. In a first line of argumentation the appellant relied on decision T 848/93 of 3 February 1998 and submitted

that it was established case law that a method claim was limited by the purpose of the method.

8. The board notes that in the case underlying decision T 848/93, *supra*, a method was claimed which differed from the method disclosed in the prior art only in its use (remelting instead of vapour phase soldering). The then competent board considered that the intended use feature was a functional technical feature which limited the claim (see points 3.1 to 3.2 of the reasons). While the claim underlying decision T 848/93, *supra*, related to the new use of a method to achieve a particular effect, the claim at issue in the present case relates to a known method for a particular purpose, namely the production of a product, wherein the product is the necessary result of the known method and indistinguishable from the product obtained in the prior art. In the board's judgement decision T 848/93, *supra*, is for this reason alone not relevant to the present case and cannot be relied on to justify the view that the purpose of the claimed method should be considered a limiting technical feature of claim 1.
9. In a second line of argumentation the appellant submitted that document (D3) did not disclose the technical effect of reducing saturated fatty acid levels. Therefore, following the reasoning of decision G 2/88, *supra*, (see point 10 of the reasons), the purpose limitation was a technical feature providing novelty.
10. The board notes that decision G 2/88, *supra*, has held (see point 10.3 of the reasons) "*with respect to a claim to a **new use of a known compound** such new use may*

*reflect a newly discovered technical effect described in the patent. The attaining of such a technical effect should then be considered as a functional technical feature of the claim (e.g. the achievement in a particular context of that technical effect). If that technical feature has not been previously made available to the public by any of the means as set out in Article 54(2) EPC, then the claimed invention is novel, even though such technical effect may have inherently taken place in the course of carrying out what has previously been made available to the public."* Headnote III decision G 2/88, *supra*, reads "*A claim to the **use of a known compound for a particular purpose, which is based on a technical effect which is described in the patent, should be interpreted as including that technical effect as a functional technical feature, and is accordingly not open to objection under Article 54(1) EPC provided that such technical feature has not previously been made available to the public.***" (Emphasis added).

11. Unlike the case underlying decision G 2/88, *supra*, the claim under consideration in the present case is not directed to a new use of a known compound for a particular purpose but to a known method for the purpose of producing a product and so the question arises whether the principles developed in decision G 2/88, *supra*, can be applied to the present situation at all. In this context it is of relevance that decision G 2/88, *supra*, distinguishes clearly between claims directed to the use of a product to achieve an effect (this being the normal subject of a use claim) and claims directed to a process of manufacture of a product (see point 5.1 of the reasons). Decision G 2/88,

*supra*, is however silent on the issue of whether the purpose can be considered a functional technical feature of a claim directed to a process for producing a product characterised by process steps, wherein the purpose of carrying out said process steps is indicated in the claim.

12. The appellant took the view that the principles developed in decision G 2/88, *supra*, could be applied to the present case and relied in this context on decision T 1092/01 of 26 April 2005 (see point 17 of the reasons). It submitted that in decision T 1092/01, *supra*, the present board noted that it was the information content of any prior art document that was critical, and not what might inherently have occurred if a method described in the prior art had been carried out (see point 14 of the reasons). In the present case, although saturated fatty acid levels would have been reduced when the selection method was applied in the methods of document (D3), this was completely unrecognised and was in no way discernable by the skilled person from the teachings of document (D3) and was therefore not disclosed in the sense of Article 54(2) EPC. Moreover, in its view decision G 1/92 of the Enlarged Board of Appeal (OJ EPO 1993, 277) was not relevant because the claim under consideration was directed to a method and not to a product.
  
13. The board agrees with the notion that it is the information content of the (any) prior art document that is critical. In the present case it is uncontested that document (D3) makes available a milk which is indistinguishable from the milk obtained according to the method of claim 1. Moreover, as also pointed out by

the appellant, the fatty acid composition of the milk could be analysed and quantified very simply using standard chemical tests and is a readily identifiable property.

14. Decision G 1/92, *supra*, is of course relevant to the present situation because the issue to be decided is what has been made available to the public by document (D3). In accordance with decision G 1/92, *supra*, (see Headnote 1) the chemical composition of a product belongs to the state of the art when the product as such is available to the public and can be analysed and reproduced by the skilled person, irrespective of whether or not particular reasons can be identified for analysing the composition.
  
15. Applied to the facts at hand this means that the chemical composition of the milk produced in document (D3) and thus also its fatty acid composition was available to the public from document (D3), even though it is not explicitly disclosed in document (D3). Therefore, and regardless of whether or not the principles of decision G 2/88 can be applied to the claim under consideration at all, in the board's judgement the hitherto undetected saturated fatty acid composition of the milk obtained by the process known from document (D3) can in any case not be considered a functional technical feature in the sense of decision G 2/88, *supra*, that would establish the novelty of the method of claim 1 over document (D3) because it has previously been made available to the public.
  
16. As regards decision T 1092/01, *supra*, it is noted that this board (in a different composition) had held that

the rationale of decision G 2/88, *supra*, was applicable to a claim directed to a known process with which a previously unknown technical effect (conversion of lutein to its isomeric form zeaxanthin) was achieved. The board considered that the relevant question to be answered was whether the skilled person would use the claimed process for a purpose different from that for which the processes of the prior art were used. In the board's judgement, in view of its starting material and its procedural steps, the claimed process could only serve the same final purpose of production of pigments for food industry. The disclosure of the purpose did not open the way to a new activity and occurred inherently when carrying out the process of the prior art. Hence the board concluded that the statement of such an effect could not confer novelty to the claimed process (see points 18 to 21 of the reasons).

17. Similarly, in the board's judgement the skilled person would not in the present case use the process for any purpose other than the production of its inevitable product, namely milk containing only  $\beta$ -casein having a proline at position 67 and therefore also having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids.
  
18. The board notes that, according to more recent case law of the Boards of Appeal, the criteria set out in decision G 2/88, *supra*, may only be applied to claims directed to the use of a substance for achieving an effect and cannot be extended to claims to a process for producing a product characterised by process steps, wherein the purpose of carrying out such process steps is indicated in the claim (see Case Law of the Boards



of Appeal, 6th edition 2010, section I.C.5.3.1.e and f; and decisions T 1343/04 of 11 December 2007, point 2 of the reasons; T 1179/07 of 10 March 2009, point 2.1.3 of the reasons; T 304/08 of 26 August 2009, point 3.3.2 and 3.3.3. of the reasons, T 2215/08 of 22 March 2012, point 2.4.1. of the reasons).

19. The final argument of the appellant, namely that in the light of the present invention new and commercially significant uses for the milk have emerged, is quite irrelevant to the subject-matter claimed which does not relate to the use of the milk but to its production.

20. The board concludes from the above that the relevant technical features for the purpose of assessment of the novelty of the method of claim 1 are its physical steps and that document (D3) which discloses these physical steps anticipates the subject-matter of claim 1 of the main request.

*Auxiliary requests 1 to 5 and 8 - claim 1 - Novelty (Article 54 EPC)*

21. The appellant submitted no further arguments for these requests and conceded that the objections that applied to the main request also applied to these requests despite the fact that the wording of the claims was slightly different in each request. In the absence of further arguments from the appellant the board can only come to the conclusion that at least the subject-matter of claim 1 of these requests lacks novelty for the same reasons as indicated above for claim 1 of the main request (see points 2 to 20).

*Auxiliary requests 6 and 7 - claim 1 - Novelty (Article 54 EPC)*

22. In auxiliary requests 6 and 7 the claims have been amended to the form "use of method X for purpose Y" (see section V above). The appellant submitted that such a form mirrored closely the form "use of composition X for purpose Y" that was specifically approved in decision G 2/88, *supra*. It submitted that by shifting to "use of method for a purpose" claims the purpose should be limiting.
23. As pointed out above (see points 10 and 11) decision G 2/88, *supra*, relates to claims directed to the use of a known compound for a particular purpose. In contrast thereto in the present case the claims are directed to the use of a known method for a particular purpose. In the board's judgement the claims are - despite the wording chosen by the appellant - still directed to a method for the production of the product necessarily resulting from the method. The physical steps of this method and the product obtained - milk containing only  $\beta$ -casein having a proline at position 67 and having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids - are disclosed in document (D3) (see points 5, 6 and 15 above).
24. The board concludes that document (D3) anticipates the subject-matter of claim 1 of auxiliary requests 6 and 7.

*Auxiliary request 9 - claim 1 - Novelty (Article 54 EPC)*

25. Claim 1 of auxiliary request 9 is directed to a method of producing bovine milk comprising three steps (a) to (c) and characterised in that the milk produced by the

- selected cows comprises reduced levels of saturated fatty acids relative to the level of unsaturated fatty acids, compared with milk obtained from a herd comprising selected and non-selected cows (see section V above).
26. The appellant submitted that the claims were directed to the production of milk having reduced levels of saturated fatty acids relative to the level of unsaturated fatty acids that provided for potential new applications for the milk product. Such applications included, for example, those that exploited the physical attributes associated with a milk fat product, such as melting point and spreadability, as well as those relating to the plethora of health conditions linked to saturated fat consumption, including obesity and diabetes. Claim 1 therefore presented new technical information that was not provided in the prior art.
27. The allegedly new applications are not claimed and as explained above (see points 5 and 15) document (D3) discloses a method of producing milk which comprises the three steps (a) to (c) specified in present claim 1 and also makes available milk containing only  $\beta$ -casein having a proline at position 67 and having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids. The board concludes that document (D3) also anticipates the subject-matter of claim 1 of auxiliary request 9. This finding is in line with decision T 910/98 of 30 October 2001 (see point 2.2.2 of the reasons) which held that a known process is not rendered novel by reference to a newly discovered inherent property of the product inevitably obtained by the known process.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

P. Cremona

C. Rennie-Smith