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Datasheet for the decision of 20 December 2012

Case Number:	т 1617/08 - 3.3.08		
Application Number:	96936219.3		
Publication Number:	862623		
IPC:	C12N 9/98, A21D 8/04		

Language of the proceedings: EN

Title of invention:

Microgranule for food/FEED APPLICATIONS

Patentee:

GENENCOR INTERNATIONAL, INC.

Opponents:

NOVOZYMES A/S BASF Aktiengesellschaft

Headword:

Enzyme containing microgranule/GENENCOR INTERNATIONAL

Relevant legal provisions:

EPC Art. 123(2), 56 RPBA Art. 13(1)

Keyword:

"Main request - inventive step (no)" "Auxiliary requests I and II - not admitted"

Decisions cited:

T 0047/03, T 0745/03, T 0221/06, T 0565/07, T 1685/07, T 1509/09, R 0011/08, R 0005/11

Catchword:

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Boards of Appeal

Chambres de recours

Case Number: T 1617/08 - 3.3.08

D E C I S I O N of the Technical Board of Appeal 3.3.08 of 20 December 2012

Appellant: (Patent Proprietor)	GENENCOR INTERNATIONAL, INC. 925 Page Mill Road Palo Alto, California 94304—1013 (US)
Representative:	Andrews, R.K. Mewburn Ellis LLP 33 Gutter Lane London EC2V 8AS (GB)
Respondent I: (Opponent 1)	NOVOZYMES A/S Krogshoejvej 36 DK-2880 Bagsvaerd (DK)
Representative:	Stevens, I. Potter Clarkson LLP The Belgrave Centre Talbot Street Nottingham NG1 5GG (GB)
Respondent II: (Opponent 2)	BASF Aktiengesellschaft -Patentabteilung – C6– Carl-Bosch—Strasse 38 D—67056 Ludwigshafen (DE)
Representative:	Schweiger, G. Patentanwälte Reitstötter, Kinzebach & Partner (GbR) Sternwartstrasse 4 D-81679 München (DE)
Decision under appeal:	Decision of the Opposition Division of the European Patent Office posted 6 June 2008 revoking European patent No. 862623 pursuant to Article 101(3)(b) EPC.

Composition of the Board:

Chairman:	Μ.	Wieser
Members:	В.	Stolz
	С.	Heath

Summary of Facts and Submissions

- I. The appeal lies against the decision of the opposition division to revoke European patent No. 0862623.
- II. The opposition division found that the main request before it did not meet the requirements of Articles 123(2) and 84 EPC, that the first and second auxiliary request did not meet the requirements of Article 56 EPC, that the third auxiliary request did not meet the requirements of Article 123(2) EPC, and that the fourth and fifth auxiliary requests did not meet the requirements of Articles 123(2) and 84 EPC.
- III. With its statement of the grounds of appeal, the patent proprietor (appellant) filed a new main request, and new auxiliary requests I to V.
- IV. Opponent I (respondent I) and opponent II (respondent II) submitted their comments to the statement of grounds of appeal.
- V. Reacting to the respondents' submissions, the appellant submitted further arguments, a new main request, and new auxiliary requests I to III replacing all previous auxiliary requests.
- VI. The parties were summoned to oral proceedings to be held on 20 December 2012. A communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA) annexed to the summons, informed them of the preliminary non-binding opinion of the board on some of the issues of the appeal proceedings.

- VII. With letter dated 19 November 2012, the appellant submitted a new main request and auxiliary requests I to VI, replacing all previous requests.
- VIII. During oral proceedings, held on 20 December 2012, the appellant filed new auxiliary requests I and II and withdrew all previous auxiliary requests.
- IX. Independent claim 1 of the main request of 19 November 2012 reads:

"1. Enzyme-containing microgranules suitable for food or feed applications comprising: a) a suitable carrier in particulate form; coated with b) an aqueous enzyme source blended with c) one or more binder(s) or disintegrant(s); and in turn coated with d) a water soluble, food grade polymer coating agent; said microgranules having an average size between 20 to 200 microns."

Independent claim 5 refers to a method for making the microgranules of claim 1. Dependent claims 2 to 4 and 6 to 10 refer to specific embodiments of claims 1 and 5, respectively.

- X. The following documents are referred to in this decision:
 - D4: WO 88/015 12, published on 10.03.1988
 - D5: WO 88/01506, published on 10.03.1988

D10: JP 60-37983, published 27.02.1985

- D16: Williams, J.C. "The mixing of Solid Particles", Pharm. Ind. 34(11) p.816-820, 1972
- D20: English translation of abstract and claims of CN 1051197 A, published May 8, 1991
- D2OA: English translation of the complete document CN 1051197 A, published May 8, 1991
- D21: DE 4119281 Al, published December 17, 1992
- D24: Excerpts from the EU directive on food additives "Richtlinie Nr. 95/2/EG des Europäischen Parlaments und des Rates vom 20. Februar 1995 über andere Lebensmittelzusatzstoffe als Farbstoffe und Süssungsmittel"
- XI. Appellant's arguments as far as relevant for the present decision can be summarized as follows:

Regarding the main request:

The main request was filed to address the issues raised in the board's communication. The request was identical with auxiliary request I filed with the grounds of appeal and therefore known to the respondents. The only modification was the deletion of previous claims 5, 8 and 12 which corresponded to what the appellant had requested as a "preliminary auxiliary request" (cf. page 11 of the statement of grounds of appeal).

The claimed microgranules were new and inventive, and their distinct size range resulted in a more

homogeneous distribution in food or feed. The prior art did not provide enzyme coated particles in the claimed size range. The particles disclosed in documents D4 and D5 had different sizes, were produced by different processes, and had a completely different structure. It was not obvious that the process of Document D20A could be easily adapted to the production of smaller particles because, according to document D10, particles smaller than 100 μ m tended to agglomerate. It was moreover not obvious that microparticles of a smaller size range would have improved mixing properties. According to document D16, a uniform size of the particles was needed to achieve homogeneous mixing.

Regarding admissibility of the auxiliary requests:

Auxiliary requests I and II corresponded to the third auxiliary request filed with the grounds of appeal with additional modifications as addressed on pages 11 and 12 of the statement of grounds of appeal ("1st" and "2nd supplementary claim requests"). In both auxiliary requests claims 5, 8 and 12 as granted were deleted and claim 1 was modified according to the "2nd supplementary claim request". In both requests, the size range of the claimed microparticles was limited to 20 to 200 μ m. Auxiliary request II contained a further modification according to the "1st supplementary claim request".

Regarding procedural deficiencies in opposition:

Document D20, an English abstract of a Chinese patent document, was filed on the last day of the time limit set under Rule 116 EPC. Document D20A, a translation of the complete document, was only filed after expiry of the time limit. The full content of document D2OA was absolutely critical in determining its relevance to the claimed invention. In reaction to the late filing of document D2OA, the patent proprietor had asked for a postponement of the oral proceedings. This request was however rejected by the opposition division, who by exercising its discretion under Article 114 EPC wrongly, left the patent proprietor with only a few weeks to react to an entirely new situation.

XII. Respondent I's arguments as far as relevant for the present decision can be summarized as follows:

Regarding the main request:

The main request should not be allowed into the procedure. It reintroduced problems under Articles 84 and 123(2) EPC which were considered to be solved by other requests previously filed by the appellant. Moreover, the claimed microgranules lacked an inventive step over document D20A in combination with document D4. Document D20A provided enzyme coated microgranules with all the features of claim 1 except for the size range of the particles. Document D4 taught the usefulness of particles with a size ranging from 25 to 500 μ m. The selection of a size range from 20 to 200 μ m was arbitrary with no proven advantage or technical effect, and the method disclosed in document D20A could be readily adapted to produce the claimed size range.

Regarding admissibility of auxiliary requests I and II:

The requests were not admissible because they contained combinations of features which were never discussed before.

Regarding procedural deficiencies in opposition:

The appellant received document D20 two months before oral proceedings in opposition and the complete translation, document D20A, 6 weeks before oral proceedings. It had sufficient time to consider its reactions and the opposition division exercised its discretion correctly.

XIII. Respondent II's arguments as far as relevant for the present decision can be summarized as follows:

Regarding the main request:

Admission of the main request would violate the principle of procedural economy. Problems which had been considered to be solved by previous amendments were reintroduced in the main request. The request was also not allowable under the provisions of Articles 56, 84 and 123(2) EPC.

The claimed microgranules were not inventive in view of document D20A in combination with the general knowledge of the skilled person or, in the alternative, in combination with the disclosure of document D4. Regarding admissibility of auxiliary requests I and II:

The requests, submitted on the day of the oral proceedings, were not admissible because they represented fresh cases.

XIV. The appellant requested that the decision under appeal be set aside and the patent be maintained based on the Main Request filed with letter dated 19 November 2012, or any of auxiliary requests 1 and 2, filed during oral proceedings, in the auxiliary that the decision under appeal be set aside and that the case be remitted to the first instance for further prosecution, and the appeal fee be reimbursed.

> Further in the auxiliary, the appellant requested that the following questions be referred to the Enlarged Board of Appeal:

"1. Where evidence (for example a prior art document) is late filed by an opponent in opposition proceedings (for example after expiry of the final date for making submissions set by the opposition division) and that evidence is accepted by all the parties as prima facie highly relevant to a ground of opposition and therefore in principle admissible under Art 114 (for example it is to be taken as the closest prior art, or otherwise alters the fundamental framework of the case) should the OD accede to a request that in the event that the OD intend to issue a decision adverse to the proprietor based on that late filed evidence (for example revocation of the patent) the hearing should be adjourned to give the proprietor the opportunity to file observations and/or fallback amendments in response to the adverse opinion expressed by the OD at the hearing (T 484/89; page 445 CLBA).

2. If the answer to question I is no, are Art 113(1), Art 101(1) and Rule 81(3) complied with even though the OD has not provided any written statement regarding the prima facie relevant evidence, or any fallback amendments made by the proprietor in response to that evidence, prior to reaching a decision at the hearing adverse to the proprietor based on the evidence.

3. Irrespective of the answer to question 1, if the OD do not adjourn the hearing and instead issue a decision adverse to the proprietor based on the late filed evidence, and the proprietor appeals, should the Board at the request of the proprietor remit the case back to the OD under Art 111(1) to give the proprietor the opportunity to file observations and/or fallback amendments in response to the adverse decision given by the OD at the hearing.

4. If the answer to question 3 is no, how can this be reconciled with the requirement in the EPC that a Proprietor must be given the possibility of properly defending their patent at two levels of jurisdiction (cf. Case law book 10.2.1; page 862; also T 1071/93)."

XV. The respondents requested that the appeal be dismissed.

Reasons for the decision

Main request

1. The main request was filed one month before oral proceedings. Except for the deletion of claims 5, 8 and 12, it is identical with auxiliary request 1 which had originally been filed with the grounds of appeal but had later been withdrawn. The appellant reverted to this request in response to comments made by the board in its preliminary communication in respect of the then pending requests. In this communication, the board had addressed issues which had not been raised before in appeal proceedings.

Under these circumstances, the board, exercising its discretion under Article 13(1) RPBA, decided to admit the main request.

Article 123(2)

2. The main request is almost identical with auxiliary request II filed in opposition proceedings on 15 May 2007. The only difference is the <u>particulate form</u> of the carrier of claim 1.

> In opposition proceedings, the respondents raised no objections under the provisions of Article 123(2) EPC, and the opposition division held that auxiliary request II before it complied with said requirements.

Thus, the only issue to be assessed is whether the application documents as originally filed directly and

unambiguously disclose the microparticles of claim 1 comprising a carrier in particulate form.

- 3. According to the published international patent application, the invention relates to enzyme microgranules useful in food and feed applications (page 1, first two lines), comprising a suitable carrier (e.g. claim 1). According to "a process aspect" of the claimed invention (cf. page 5, second paragraph), a blend of enzyme and binder is sprayed onto the carrier to build up a granular form. The process feature of spraying an enzyme onto a carrier implies a particulate nature of the carrier material. Furthermore, the exemplary suitable carriers listed in the first paragraph of the section entitled "Detailed Description of the Invention" (cf. page 3) such as e.g. soy flour, soy grits etc. are all in particulate form. Finally, the carriers used in Examples 1 to 10 were all in particulate form.
- 4. The board is therefore satisfied that the main request meets the requirements of Article 123(2) EPC.

Articles 123(3), 84 and 54 EPC

5. The respondents did not raise any objections under the provisions of Articles 123(3), 84 and 54 EPC and the board sees no need to do so on its own motion.

Article 56 EPC

6. The subject matter of claim 1 is a food grade microgranule comprising a particulate carrier coated with, in that order, a layer comprising a blend of

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enzyme and a binder or disintegrant, and a polymer coating agent. The microgranules have an average size between 20 to 200 $\mu m.$

7. Document D20A represents the closest prior art. It discloses a process for making enzyme containing microgranules in a fluidised bed apparatus which comprises a first fluidised granulation bed and a second fluidised granulation bed, the latter coaxially joined to and located beneath the distributor plate of the first granulation bed. The upper bed is used to coat a water soluble powder material (i.e. a carrier in particulate form) with an enzyme and a binder. The lower bed is used for film-coating. The distributor plate of the upper bed is porous with a single straight hole and the upper end of an air classifier tube is fixed to and opens at the centre of the distributor plate. A gas stream flowing upwards through the classifier tube prevents coated particles in the upper fluidized bed from discharging into the lower bed before they have reached the desired size (mass).

> An exemplary carrier material is sodium sulphate (Examples 1 to 3), exemplary binder solutions comprise sodium silicate and one of yellow dextrin, starch or gelatin (e.g. claim 5), and the coating agent is poylethylene glycol (e.g. claim 6). All these compounds are suitable for food or feed applications (cf. document D24), and the exemplary microparticles produced by the method of document D20A have a size range from about 210 to 1000 microns (claim 2 and Examples 1 to 3).

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The technique produces no dust pollution and the product can be widely used e.g. in the feed area (cf. abstract and page 1, 1st paragraph, of the description).

Document D20A thus discloses enzyme containing microgranules having all features of claim 1 except for the claimed average size of between 20 and 200 microns (cf. point 6 above).

- 8. Starting from document D20A, the technical problem underlying the present invention is seen in the provision of alternative enzyme containing microgranules.
- 9. As a solution to this problem the application proposes the microgranules of claim 1 characterized by an average size between 20 and 200 microns and composed of a particulate carrier coated with an enzyme and a binder, and in turn coated with a water soluble food grade polymer.
- 10. Example 5 of the patent in suit discloses the production of microgranules consisting of agglomerated soy flour, coated with a blend of hydrolysed starch and cellulase, and in turn coated with algin. According to Table II of Example 5, 76% of the resulting particles have a size between 63 and 250 μ m.
- 11. The board is satisfied that the underlying technical problem is solved.
- 12. It remains to be established if the claimed solution could be derived in an obvious way either from the

disclosure of document D20A alone or upon combination with any other prior art document on file.

- 13. Document D20A explicitly refers to adjusting the speed of the gas in the classifier tube according to need, "thereby controlling the size of the product granules" (page 4, second paragraph). Exemplary gas velocities for achieving a specific particle size are given in claim 2 and in the examples. Thus, document D20A, although not disclosing particles of the claimed average size, provides the necessary technical means for producing enzyme-containing microgranules with all the features of claim 1.
- 14. The appellant argued that the skilled person would not have tried to produce particles of the claimed average size between 20 and 200 microns because it would have had strong doubts about the mixing properties of the resulting product.

According to document D16 (page 817, left hand column), components to be mixed should be of the same size if segregation had to be avoided. Therefore, a product with an average size from 20 to 200 microns would not be expected to have good mixing properties.

Furthermore, it was not obvious that particles with the claimed average size could be produced. According to document D10 (page 6, line 10), particles smaller than 100 microns tended to agglomerate, making spherical granulation more difficult.

15. The board is not convinced by these arguments.

No argument has been put forward that it would be technically difficult to produce microgranules of the claimed average size by adjusting the gas flow velocity in the procedure disclosed in document D20A.

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Enzyme containing microgranules with an average size between 25 and 350 microns were disclosed in document D4 where it was also stated in general terms that "Microgranules of a small particle size are most desirable, as they may be evenly distributed through feed and allow rapid release of enzymes" (paragraph bridging pages 7 and 8). Similarly, in document D21 it was stated that enzyme coated carrier particles with a grain size from 50 to 600 microns provided good mixing properties in food or feed (column 1, lines 13 to 20).

Regarding the argument that particles with a size of less than 100 microns tended to agglomerate, the board notes that this statement, taken from document D10, referred to the properties of carrier particles in a fluid bed granulator but not to the mixing properties of the final coated product. Moreover, even if it were true that carrier particles of less than 100 microns tended to agglomerate in the fluid bed granulator it would still be possible to obtain microgranules with an average size between 100 and 200 microns. (Note in this context that only about 11% of the microgranules of Example 5 of the patent in suit have a size of less than 90 microns.)

16. Based on the available prior art, the board is therefore convinced that there was no prejudice against

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the production of enzyme-coated granules with an average size between 20 to 200 microns, that there was a general interest in producing microgranules with an average size from e.g. 25 to 350 microns (cf. document D4), and that the procedure of document D20A could be easily adapted as needed. In the absence of any unexpected properties of the claimed microgranules, the board concludes that the selection of microgranules with an average size from 20 to 200 microns, which corresponds to the lower half of the size range held to be desirable in document D4, lacks an inventive step.

17. Therefore, the main request lacks an inventive step.

Admissibility of auxiliary requests I and II

18. Claim 1 of auxiliary request I is derived from claim 1 of auxiliary request III filed with the grounds of appeal. It contains additional amendments concerning the specification of the binder as hydrolysed starch, and a limitation of the average size from 20 to 400 microns to 20 to 200 microns.

> Claim 1 of auxiliary request II is also derived from claim 1 of auxiliary request III filed with the grounds of appeal. The additional amendments concern the specification of the binder as hydrolysed starch and of the disintegrant as corn syrup solids, respectively, and a limitation of the average size from 20 to 400 microns to 20 to 200 microns.

19. With its statement of grounds of appeal, the appellant submitted auxiliary requests I to V and requested that it be allowed to file further requests "should it be

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needed" (cf. pages 11 and 12 of the statement of grounds).

- 20. The purpose of an oral hearing in appeal proceedings is to give the parties an opportunity to argue their case but not to give an appellant patentee the opportunity to repeatedly modify its requests until an acceptable set of claims is found (see among others T 47/03 of 27 September 2005; T 745/03 of 22 September 2005; T 221/06 of 24 July 2008 and R 11/08 of 6 April 2009; T 565/07 of 10 September 2009; T 1685/07 of 4 August 2010 and R 5/11 of 22 August 2011; T 1509/09 of 5 July 2012).
- 21. Claim 1 of both auxiliary requests contains specific combinations of features which in this form were never before presented in opposition or in appeal proceedings. Admitting the requests at this stage of the proceedings would therefore require the assessment of new issues and lead to procedural delays.
- 22. For this reason, the board, exercising its discretion under Article 13(1) RPBA, decided not to admit auxiliary requests I and II.

Request for finding of a substantial procedural violation

23. The opposition division had set a time limit of 15 March 2007 for the filing of further observations under the provisions of Rule 116 EPC. Document D20, an English translation of the abstract and claims 1 to 10 of Chinese Patent number CN 1051197, was filed on the last day of this time limit, i.e. two months before the oral proceedings were held. Document 20A, the English translation of the full Chinese document, was filed on 30 March 2007. Both opponents considered these documents highly relevant. With letter dated 11 May 2007, the patent proprietor (appellant) filed amended claim sets and requested that the oral proceedings be adjourned should the opposition division consider issuing a decision adverse to it on the basis of the newly filed evidence. Oral proceedings were held on 15 May 2007 and the opposition division decided to admit the documents into the proceedings but did not grant a request for postponement of the oral proceedings.

- 24. The appellant did not contest the relevance of documents D20 and D20A and their admission into the proceedings. The appellant however submitted that the opposition division committed a substantial procedural violation by not granting its request to adjourn the oral proceedings, and requested that the case be referred back to the opposition division "[u]nless the Board forms the view that the OD's finding of lack of inventive step over D20/D20A should be overturned ...". In the auxiliary it requested that the board refer certain questions of law to the Enlarged Board of Appeal (cf. item IV above).
- 25. Regarding the review of first instance discretionary decisions, it is established jurisprudence of the boards of appeal that "If the way in which a department of first instance has exercised its discretion on a procedural matter is challenged in an appeal, it is not the function of a board of appeal to review all the facts and circumstances of the case as if it were in the place of the department of first instance, and to

decide whether or not it would have exercised such discretion in the same way as the department of first instance. A board of appeal should only overrule the way in which a department of first instance has exercised its discretion if the board concludes it has done so according to the wrong principles, or without taking into account the right principles, or in an unreasonable way" (Case law of the Boards of Appeal, 6th edition, VII.E.6.6).

26. Document D20A was filed six weeks before oral proceedings were held but after the time limit set under Rule 116 EPC.

> The abstract of document D20, which was filed in time, refers to the use of a granular enzyme preparation *inter alia* in fodder. Independent claims 1 and 7 of document D20 provide detailed technical information of the process and the apparatus, respectively, used for making the enzyme preparation. Dependent claim 2 discloses that regulation of the classification gas flow is used to control particle size, and dependent claims 5 and 6 specify the use of food grade binders and a food grade coating agent, respectively.

> While the late filed document D20A provides a more extensive description of the method and apparatus used for preparing the microgranules, it does not provide technical information of more relevance to the present case than document D20.

The fact that document D20A was filed late is very much mitigated by the fact that document D20 contains virtually the same relevant information as document D20A, and the latter merely confirms the contents of document D20. Therefore, the Board takes the view that the opposition division, in admitting document D20A and in not granting the request for postponement of the oral proceedings, did not commit a substantial procedural violation but rather exercised its discretion correctly.

Consequently, the board sees no reason to remit the case back to the first instance.

Referral of a question of law to the Enlarged Board of Appeal

- 27. The appellant requested that certain questions of law be referred to the Enlarged Board of Appeal should the board not grant its request for remittal to the first instance (cf. paragraph XIV, above).
- 28. According to Article 112 EPC, questions of law shall be referred to the Enlarged Board of Appeal if the board of appeal considers that a decision is required in order to ensure uniform application of the law or if a point of law of fundamental importance arises.
- 29. The boards of appeal have consistently held that a discretionary decision of an opposition division should only be overruled if a board concludes that the opposition division exercised its discretion according to the wrong legal principles, or without taking into account the right principles, or in an unreasonable way (cf. point 25, above). Thus, there is no divergent application of the law in this respect.

Neither can the issue bee considered to be of fundamental or even general importance, as the opposition division took its decision based on the specifics of the case, i.e. the similar technical contents of documents D20 and D20A. As held above, the opposition division under such circumstances cannot be faulted for reaching the conclusion that the late filing of the complete document did not prejudice the patentee's possibility of properly defending itself during oral proceedings.

- 30. In view of the above, the board sees no reason to refer any questions of law to the Enlarged Board of Appeal.
- 31. Since there is no allowable request, the appeal has to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

A. Wolinski

M. Wieser