Datasheet for the decision of 20 December 2010

Case Number: T 1474/09 - 3.3.05
Application Number: 01128224.1
Publication Number: 1288179
IPC: C05C 9/02
Language of the proceedings: EN

Title of invention:
Method for making nitrogenous and complex fertilizers in highly homogenized spherical granule form starting from urea-formaldehyde liquid resins and the fertilizer made thereby

Applicant:
Sadepan Chimica S.r.l.

Headword:
Nitrogenous granular fertilizer/SADEPAN S.R.L.

Relevant legal provisions:
EPC Art. 123(2), 111(1)

Keyword:
"Main request allowable under Article 123(2) EPC: amended claims do not go beyond original disclosure"
"Remittal"

Decisions cited:
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Catchword:
-
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DECISION
of the Technical Board of Appeal 3.3.05
of 20 December 2010

Appellant: Sadepan Chimica S.r.l.
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Representative: Cicogna, Franco
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 2 February 2009
refusing European application No. 01128224.1
pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: G. Raths
Members: H. Engl
           C. Vallet
Summary of Facts and Submissions

I. This appeal is from the decision of the examining division, dated 26 January 2009, to refuse European patent application EP 01 128 224.1. The decision was based on the ground that the claims on file did not meet the requirements of Article 123(2) EPC.

II. The notice of appeal was filed with letter dated 30 March 2009. The statement of grounds of appeal was submitted with letter dated 29 May 2009, accompanied by three sets of fresh claims designated as Auxiliary Requests V, VI and VII respectively (de facto constituting a main request and a first and second auxiliary request).

III. The board issued a summons for oral proceedings in which it raised several objections under Article 123(2) EPC against the new claims. The board also announced its intention to remit the case to the department of first instance if a formally allowable set of claims was arrived at.

IV. In a submission dated 3 November 2010, the appellant filed amended versions of the claims, designated as Auxiliary Requests V, VI and VII respectively. In a further letter dated 13 December 2010 the appellant filed an amended version of Auxiliary Request V (= main request). The appellant also requested cancellation of the oral proceedings scheduled for 14 December 2010 provided the board decided to remit the case to the department of first instance for further prosecution on the basis of the claims of said Auxiliary Request V.
Independent Claims 1 and 12 of Auxiliary Request V read:

"1. A method for making a nitrogenous and complex fertilizer, for slowly releasing nitrogen, in granule form, characterized in that said method comprises the steps of
   a) preparing an aqueous urea/formaldehyde dispersion with a molar ratio urea/formaldehyde from 0.8:1 to 2:1, adding to said dispersion a first aqueous catalyst solution in a weight ratio from 0.1 to 4% to start condensation, controlling the pH of said dispersion to hold said pH within a range from 4.0 to 7.0, stopping the condensation by increasing the pH, adding further urea to get a liquid mixture, and
   b) supplying the mixture to a granulating device, while adding and mixing a second aqueous catalyst and lowering the pH of the mixture, and performing a condensation/drying reaction, said granulating device including recycling means for recycling the product as a growth seed;
   c) providing a granulated product comprising spherical shaped urea/formaldehyde fertilizer granules having a diameter from 2.0 to 3.0 mm, having a high granulometric homogeneity, and having a density in the range from 0.5 to 1 g/cm$^3$, and a total nitrogen content from 36 to 42%.

"12. A granulated nitrogenous fertilizer, in particular for agricultural use, made by a method according to claim 1, characterized in that said fertilizer comprises slowly releasing nitrogen formulated fertilizer granules having an [sic!] chosen activity index (Al) from 20 to 40, from 40 to 60 or from 60 to
80, wherein said granules are spherical granules having a diameter from 2.0 to 3.0 mm."

VI. The appellant's arguments, insofar as they are relevant for the present decision, may be summarised as follows:

Claim 1:

It was clear from the description that the term "condensation" referred to the condensation reaction of urea and formaldehyde to prepare methylol urea. Therefore, the claim feature "and performing a condensation/drying reaction" was fairly disclosed in the documents originally filed.

Claim 8:

The addition of macro and/or meso and/or micro-elements was disclosed in the description, page 17, line 6 from the bottom.

Claim 12:

The values of the activity index (AI) from 20 to 80 and granule diameter were disclosed in and supported by original examples 1/2, 5/6, 7/8, 11/12 and 13/14 and by claim 12.

VII. Requests

The appellant requested that the decision under appeal be set aside and that the case be remitted to the department of first instance for further prosecution on
reasons for the decision

1. article 123(2) epC

auxiliary request v (= main request)

1.1 claim 1

1.1.1 the following claim features find a word-for-word basis in claim 1 as originally filed:

"A method for making a nitrogenous and complex fertilizer, for slowly releasing nitrogen, in granule form, characterized in that said method comprises the steps of

a) preparing an aqueous urea/formaldehyde dispersion with a molar ratio urea/formaldehyde from 0.8:1 to 2:1, adding to said dispersion a first aqueous catalyzer solution in a weight ratio from 0.1 to 4 % to start condensation, controlling the pH of said dispersion to hold said pH within a range from 4.0 to 7.0".

1.1.2 The claim features

"stopping the condensation by increasing the pH, adding further urea to get a liquid mixture, and

b) supplying the mixture to a granulating device, while adding and mixing a second aqueous catalyzer and lowering the pH of the mixture, and performing a condensation/drying reaction"
are clearly and unambiguously derivable from examples 1 to 20 as originally filed, which disclose a step of stopping the condensation reaction by adding an alkaline substance (i.e. increasing the pH), and a step of further addition of urea. Furthermore, the even-numbered examples (Nos. 2, 4, 6 etc.) each disclose a step of supplying the liquid material obtained as a result of the processes of the respective preceding, odd-numbered examples (Nos. 1, 3, 5 etc.) to a granulating device, and a step of adding and mixing a second aqueous catalyst (ammonium sulphate, formic acid), thereby lowering the pH of the mixture and resulting in a condensation/drying reaction. The condensation/drying reaction taking place in the granulating device is also disclosed on page 10, lines 2 to 5, of the description as originally filed ("water is evaporated off", "the polycondensation is properly controlled").

1.1.3 The claim feature

"said granulating device including recycling means for recycling the product as a growth seed"

is disclosed in Claim 1 as originally filed.

1.1.4 Finally, a basis for the following claim features can be found in the application documents as originally filed as follows:

"providing a granulated product comprising spherical shaped urea/formaldehyde fertilizer granules": Claim 10;
"having a diameter from 2.0 to 3.0 mm": Claim 28

"having a high granulometric homogeneity": Page 2, first paragraph;

"having a density in the range from 0.5 to 1 g/cm³": Claim 8; and

"and a total nitrogen content from 36 to 42%": Claim 16.

1.2 Claim 12

The features of independent product claim 12 are disclosed in claims 16, 24, 25, 26 and claim 28 of the application documents as originally filed.

1.3 Dependent claims 2 to 11, 13 to 19

These claims are identical to claims 2 to 7, 12 to 15, 23, 30 to 33, 9 and 17 as originally filed.

1.4 The requirements of Article 123(2) EPC are thus met.

1.5 In view of the above, there is no need to consider the claims of the subordinate requests.

2. Remittal

The decision under appeal only dealt with objections under Article 123(2) EPC against Claim 1. Under these circumstances the board, exercising its discretion under Article 111(1), second sentence, EPC, finds it
appropriate to remit the case to the department of first instance for further prosecution, in accordance with the appellant's request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution on the basis of the set of claims filed with letter of 13 December 2010 as Auxiliary Request V.

The Registrar

The Chairman

C. Vodz

G. Raths