

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 September 2010 (23.09.2010)

PCT

(10) International Publication Number
WO 2010/106475 A3

(51) International Patent Classification:

A23K 1/00 (2006.01) A23K 1/16 (2006.01)
A23K 1/06 (2006.01) A23K 1/175 (2006.01)

(21) International Application Number:

PCT/IB2010/051071

(22) International Filing Date:

12 March 2010 (12.03.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2009/02000 20 March 2009 (20.03.2009) ZA

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

18 November 2010

(54) Title: A METHOD OF REDUCING THE RATE OF DEGRADATION OF A BIOLOGICAL MATERIAL

(57) Abstract: A method of producing an animal feed product from a wet biological material, having a physical form selected from solutions, suspensions, emulsions, gums, mousses, sludges, slurries, and particulate materials, includes the step of combining the biological material with a base comprising a metal oxide in an amount which is sufficient to heat the biological material to a temperature of above 50°C by reaction of water in the biological material with the metal oxide to produce the animal feed product. The product has a physical form which is easier to handle than that of the wet biological material and is selected from particulate materials and, granular materials. The base is preferably calcium oxide.



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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER

INV. A23K1/00 A23K1/06 A23K1/16 A23K1/175
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A23K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, COMPENDEX, FSTA, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 643 622 A (SAWHILL WALLACE [US]) 1 July 1997 (1997-07-01) example 8	1-3, 5-7, 13-16, 32-34
X	US 4 631 192 A (MOMMER RICHARD P [US] ET AL) 23 December 1986 (1986-12-23) example 11	1-9, 13-19, 32-34
X	US 2003/152689 A1 (ETHINGTON REED T [US] ET AL ETHINGTON JR REED T [US] ET AL) 14 August 2003 (2003-08-14) example 2	1-7, 10-13, 15-19, 32-34
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Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

2 September 2010

Date of mailing of the international search report

09/09/2010

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2010/051071

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 168 803 B1 (HARRIS JOSEPH M [US] ET AL) 2 January 2001 (2001-01-02) column 7, paragraph 3; examples 1-10 -----	1-7, 10-19, 32-34
X	WO 00/67589 A1 (NOREL ACQUISITION CORP [US]) 16 November 2000 (2000-11-16) page 8, lines 22-28; example 1 -----	1-9, 13, 14, 16-19, 32-34
X	GB 17759 A A.D. 1911 (VANGEL VICTOR VON [GB]) 6 August 1912 (1912-08-06) the whole document -----	20-23, 25, 26, 28, 29
X	EP 0 575 623 A1 (KAIHO CO LTD [JP]) 29 December 1993 (1993-12-29) page 4, paragraph 5; examples 1-12 -----	20-23, 25, 26, 28, 29, 35, 37-42
X	SAWAI J ET AL: "Kinetic analysis of the bactericidal action of heated scallop-shell powder" INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL LNKD- DOI:10.1016/S0168-1605(01)00619-5, vol. 71, no. 2-3, 30 December 2001 (2001-12-30), pages 211-218, XP002960770 ISSN: 0168-1605 page 212 -----	20-23, 25, 26, 28, 29
X	DATABASE WPI Week 198203 Thomson Scientific, London, GB; AN 1982-04724E XP002598771 & JP 56 158063 A (SHIMADA-YA HONTEN K) 5 December 1981 (1981-12-05) * abstract -----	35, 37-42
X	WO 90/10748 A1 (CONRAD ERNST [SE]) 20 September 1990 (1990-09-20) examples 1-3 -----	35, 37-42
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2010/051071

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-19, 32-34

A method of producing an animal feed product from wet biological material

2. claims: 20-31

A method of reducing the rate of microbiological degradation of wet biological material

3. claims: 35-42

A method of sterilising and/or preserving a substrate.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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