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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))

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(54) Title: NOVEL PHYTASES

(57) Abstract: The present invention provides novel polypeptides having phytase activity, recombinant nuclei acid molecules and vectors encoding said novel phytases, and to host cells transformed with said recombinant nuclei acid molecules and vectors. Also provided is a method of transforming a suitable host cell with polynucleotides encoding the phytases, expression of the transformed polynucleotides and the use of the expressed phytase in feed as a supplement.



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INTERNATIONAL SEARCH REPORT

International application No

PCT/NL2009/050246

A. CLASSIFICATION OF SUBJECT MATTER

INV. A23K1/165 C12N9/16 C12N15/55 C12N1/15

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)

C12N

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, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DEAN RALPH A ET AL: "The genome sequence of the rice blast fungus Magnaporthe grisea." NATURE 21 APR 2005, vol. 434, no. 7036, 21 April 2005 (2005-04-21), pages 980-986, XP002498074 ISSN: 1476-4687 supplementary online information accompanying the paper, especially tables S5 and S8 -/--	1-5, 12-21

☒ 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
- *P* document published prior to the international filing date but later than the priority date claimed

- *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.
- *G* document member of the same patent family

Date of the actual completion of the international search

13 August 2009

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Name and mailing address of the ISA/

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	-& RALPH A. DEAN ET AL: NATURE SUPPLEMENTARY INFORMATION, [Online] 21 April 2005 (2005-04-21), XP002498075 Retrieved from the Internet: URL: http://www.nature.com/nature/journal/v434/n7036/supinfo/nature03449.html> [retrieved on 2008-10-01] tables S5, S8	
X	----- DATABASE UniProt [Online] 15 May 2007 (2007-05-15), "SubName: Full=Putative uncharacterized protein;" XP002498076 retrieved from EBI accession no. UNIPROT:A4QYV5 Database accession no. A4QYV5 the whole document	1-5, 12-21
A	----- EP 0 779 037 A (GIST BROCADES NV [NL]) 18 June 1997 (1997-06-18) the whole document	1-5, 12-21
A	----- EP 0 897 985 A (HOFFMANN LA ROCHE [CH] DSM IP ASSETS BV [NL]) 24 February 1999 (1999-02-24) the whole document	1-5, 12-21
A	----- WO 99/49022 A (NOVONORDISK AS [DK] NOVO NORDISK AS [DK]) 30 September 1999 (1999-09-30) the whole document -----	1-5, 12-21

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL2009/050246

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 allsearchable 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 reportcovers 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.:

see ANNEX

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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