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(54) Title: ENGINEERING ENZYMATICALLY SUSCEPTIBLE PROTEINS

(57) Abstract: The invention provides a synthetic phytase polypeptide which encodes an enzymatically susceptible phytase. Also provided are feed or food products comprising an enzymatically susceptible phytase, and transgenic plants which express the enzymatically susceptible phytase. Further provided are methods for making and using enzymatically susceptible phytases, e.g., a method of using an enzymatically susceptible phytase in feed and food processing.

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER INV. A23K1/165 C12N15/82		
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, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2007/196449 A1 (LEI XINGEN [US]) 23 August 2007 (2007-08-23) the whole document -----	1-12
Y	US 2004/096934 A1 (FREYSSINET GEORGES [FR] ET AL) 20 May 2004 (2004-05-20) paragraph [0003] -----	1-12
A	LIM D ET AL: "CRYSTAL STRUCTURES OF ESCHERICHIA COLI PHYTASE AND ITS COMPLEX WITH PHYTATE" NATURE STRUCTURAL BIOLOGY, NATURE PUBLISHING GROUP, NEW YORK, NY, US, vol. 7, no. 2, 1 February 2000 (2000-02-01), pages 108-113, XP002938662 ISSN: 1072-8368 ----- -/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.		
<input checked="" type="checkbox"/> 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. *&* document member of the same patent family	
Date of the actual completion of the international search <p style="text-align: center; font-size: 1.2em;">7 September 2009</p>	Date of mailing of the international search report <p style="text-align: center; font-size: 1.2em;">16/09/2009</p>	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer <p style="text-align: center; font-size: 1.2em;">Turri, Matteo</p>	

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

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