



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification<sup>5</sup> : C12N 15/12, 1/19, 15/81, C07K 13/00, A23J 3/34, 3/04 // C12P 21/02, (C12N 15/81 C12R 1:865), (C12N 15/81, C12R 1:84)</p>	A3	<p>(11) International Publication Number: <b>WO 94/28126</b></p> <p>(43) International Publication Date: 8 December 1994 (08.12.94)</p>
<p>(21) International Application Number: PCT/GB94/01046</p> <p>(22) International Filing Date: 16 May 1994 (16.05.94)</p> <p>(30) Priority Data: 9310472.7 20 May 1993 (20.05.93) GB</p> <p>(71) Applicant (for all designated States except US): UNIVERSITY OF WARWICK [GB/GB]; Gibbet Hill Road, Coventry CV4 7AL (GB).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): CARR, Noel, Gordon [GB/GB]; 48 Grove Street, Leamington Spa, Warwickshire CV32 5AG (GB). MANN, Nicholas, Harold [GB/GB]; 20 Waller Street, Leamington Spa, Warwickshire CV32 5UP (GB).</p> <p>(74) Agent: BANNERMAN, David, Gardner, Withers &amp; Rogers, 4 Dyer's Buildings, Holborn, London EC1N 2JT (GB).</p>	<p>(81) Designated States: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p> <p>(88) Date of publication of the international search report: 26 January 1995 (26.01.95)</p>	
<p>(54) Title: PHENYLALANINE-FREE PROTEIN AND DNA CODING THEREFOR</p>		
<p>(57) Abstract</p> <p>A DNA molecule coding for a food protein, such as ovalbumin or casein, modified so that the codons for phenylalanine have been omitted or replaced by codons for one or more other metabolisable amino acids. Also a modified edible protein coded for by such a DNA molecule. Such modified proteins are useful in the nutrition of patients suffering from phenylketonuria.</p>		

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 5 C12N15/12 C12N1/19 C12N15/81 C07K13/00 A23J3/34 A23J3/04 //C12P21/02, (C12N15/81, C12R1:865), (C12N15/81, C12R1:84)		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC 5 C07K		
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)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PROC. 6TH INT. CONGR. FOOD SCI. TECHNOL. vol. 3 , 18 September 1983 , DUBLIN pages 3 - 4 MONCKEBERG ET AL. 'Preparation of a low phenylalanine protein by enzymatic process' see the whole document	2,3,5,6, 9
Y	---	1,7,8, 10-16
X	PATENT ABSTRACTS OF JAPAN vol. 16, no. 387 (C-0975) 18 August 1992 & JP,A,04 126 051 (SNOW BRAND MILK PROD CO LTD) 27 April 1992 see abstract	2,3,5,6, 9
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
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Date of the actual completion of the international search  15 September 1994		Date of mailing of the international search report  17 -11- 1994
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl, Fax (+ 31-70) 340-3016		Authorized officer  Gac, G

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB 94/01046

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

National Application No

PCT/GB 94/01046

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