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(21) International Application Number: PCT/EP99/07835 (22) International Filing Date: 15 October 1999 (15.10.99) (30) Priority Data: 98308456.7 15 October 1998 (15.10.98) EP (71) Applicant (for all designated States except US): DSM N.V. [NL/NL]; Het Overloon 1, NL-6411 TE Heerlen (NL). (72) Inventors; and (75) Inventors/Applicants (for US only): BEUDEKER, Robert, Franciscus [NL/NL]; Boomkwekerij 31, NL-2635 KC Den Hoorn (NL). KIES, Arie, Karst [NL/NL]; Freule van Dorthsingel 57, NL-2642 AX Pijnacker (NL). (74) Agent: WRIGHT, Simon, Mark; J. A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 5LX (GB).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(54) Title: ANTIMICROBIAL ENZYMES IN ANIMAL FEED (57) Abstract The use of two antimicrobial enzymes for use in feed for monogastric or non-ruminant animals is disclosed to improve growth and feed conversion ratio of poultry, pigs, veal calves and fish. This may enable the farmer to avoid the use of growth promoting antibiotics. The enzymes have antibacterial activity and one can disrupt the cell wall of bacteria (eg. lysozyme) with another producing a compound toxic to bacteria (eg. oxidase). The efficacy of these enzymes is enhanced by the inclusion of a polyunsaturated fatty acid (PUFA) such as arachidonic acid.		

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