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(21) International Application Number: PCT/IB99/01679 (22) International Filing Date: 17 August 1999 (17.08.99) (30) Priority Data: 9818126.6 19 August 1998 (19.08.98) GB (71) Applicant: UNIVERSITY OF SASKATCHEWAN [CA/CA]; Campus Drive, Saskatoon, Saskatchewan S7N 5B5 (CA). (72) Inventors: MAENZ, David, Daniel; Dept. of Animal and Poultry Science, Animal Science Building, 72 Campus Dr., University of Saskatchewan, Saskatoon, Saskatchewan S7N 5B5 (CA). CLASSEN, Henry, Leonard; Dept. of Animal and Poultry Science, Animal Science Building, 72 Campus Dr., University of Saskatchewan, Saskatoon, Saskatchewan S7N 5B5 (CA). NEWKIRK, Rex, Wayne; Dept. of Animal and Poultry Science, Animal Science Building, 72 Campus Dr., University of Saskatchewan, Saskatoon, Saskatchewan S7N 5B5 (CA). (74) Agent: GALE, Edwin, J.; Kirby, Eades, Gale, Baker, Box 3432, Station D, Ottawa, Ontario K1P 6N9 (CA).		(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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: PROCESS FOR CONVERTING PHYTATE INTO INORGANIC PHOSPHATE (57) Abstract A process is provided for converting phytate in a food into inorganic phosphate. The process comprises the steps of: (i) mechanically mixing a slurry comprising: (a) 100 parts by weight of the phytate-containing food, (b) 60-1000 parts by weight of a solvent mixture which comprises water and a water-immiscible organic solvent having a boiling point of 20-100 °C, the water-immiscible organic solvent constituting 20-85 % by wt. of the solvent mixture, and (c) a phytase; and (ii) drying the food to remove the organic solvent. The process has the advantage of enabling a high conversion rate of phytate into inorganic phosphate in an economical manner.		