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(21) International Application Number: PCT/NL98/00570 (22) International Filing Date: 1 October 1998 (01.10.98) (30) Priority Data: 1007302 17 October 1997 (17.10.97) NL (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): VAN DOOREN, Theodorus, Johannes, Godfried, Marie [NL/NL]; Henri Tijssenstraat 56, NL-6042 BZ Roermond (NL). MOODY, Harold, Monro [GB/NL]; Hoogzwanenstraat 148, NL-6211 BZ Maastricht (NL). SMEETS, Johanna, Christina, Maria [NL/NL]; Wilgenroos 1, NL-6002 TV Weert (NL). (74) Agent: JACOBS, Monique, Sophie, Nicole; Octrooibureau DSM, P.O. Box 9, NL-6160 MA Geleen (NL).		(81) Designated States: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ARIPO patent (GH, GM, KE, LS, MW, SD, 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>With international search report.</i>
(54) Title: PROCESS FOR THE PREPARATION OF A β-LACTAM ANTIBIOTIC (57) Abstract Process for the preparation of a β-lactam antibiotic in which a β-lactam nucleus is subjected to an enzymatic acylation reaction with the aid of an acylation agent at a molar ratio of acylation agent/β-lactam nucleus of less than 2.5, with the acylation agent and/or the β-lactam nucleus being supersaturated in the reaction mixture during at least part of the acylation reaction. In the process, a concentrated slurry or solution, for instance, of the β-lactam nucleus and/or the acylation agent with a different pH or a higher temperature than the pH or temperature at which the acylation reaction is carried out is added to the reaction mixture during the acylation reaction. Both the β-lactam nucleus and the acylation agent may be supersaturated in the reaction mixture.		