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(21) International Application Number: PCT/NL98/00134 (22) International Filing Date: 6 March 1998 (06.03.98) (30) Priority Data: 9700217 12 March 1997 (12.03.97) BE (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): KRAGTEN, Ubaldus, Franciscus [NL/NL]; Beijensweide 15, NL-6191 EK Beek (NL). BAUR, Henricus, Anna, Christiaan [NL/NL]; Rosslag 1, NL-6049 BE Roermond (NL). (74) Agent: GEERTS, Johanna, Adriana, Maria; 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, GE, 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, DE, DK, ES, FI, 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). Published <i>With international search report.</i>
(54) Title: PROCESS FOR DECOMPOSING CYCLOALKYLHYDROPEROXIDE (57) Abstract Process for decomposing a mixture containing cycloalkylhydroperoxide, which mixture includes an organic phase and an aqueous phase, wherein during the decomposition, at least one compound is present which meets the following parameters: $A > 0.5$ and $B > -1.0$ (1), A and B being dependent on T_b , ρ , n_d , ϵ_r , δ_d , δ_p , δ_h , δ , μ and $E_{T(30)}$, where T_b is the normal boiling point ($^{\circ}\text{C}$), ρ is the density measured at 25°C (kg/m^3), n_d is the refractive index (-), ϵ_r is the relative dielectric constant (-), δ_d is the Hansen solubility parameter for a dispersion ($\text{MPa}^{1/2}$), δ_p is the Hansen solubility parameter for polarity ($\text{MPa}^{1/2}$), δ_h is the Hansen solubility parameter for hydrogen bridges ($\text{MPa}^{1/2}$), δ is the Scatchard-Hildebrandt solubility parameter ($\text{MPa}^{1/2}$), μ is the dipole moment (Debye) and $E_{T(30)}$ is the Lewis donor/acceptor property (kcal/mol).		