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(21) International Application Number: PCT/EP00/04216 (22) International Filing Date: 4 May 2000 (04.05.00) (30) Priority Data: 99303622.7 10 May 1999 (10.05.99) EP (71) Applicant (for all designated States except US): SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V. [NL/NL]; Carel Van Bylandtlaan 30, NL-2596 HR The Hague (NL). (72) Inventors; and (75) Inventors/Applicants (for US only): BROEKHUIS, Antonius, Augustinus [NL/NL]; (NL). DIRKZWAGER, Hendrik [NL/NL]; (NL). HEERES, Hero, Jan [NL/NL]; (NL). VAN DER LINDEN, Adrianus, Johannes [NL/NL]; (NL). MUL, Wilhelmus, Petrus [NL/NL]; (NL). PELLO, Dennis, Humphrey, Louis [NL/NL]; (NL). SERVAAS, Sjoerd, Carel [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL).		(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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: PROCESS FOR THE PREPARATION OF COPOLYMERS OF CARBON MONOXIDE AND OLEFINICALLY UNSATU- RATED COMPOUNDS (57) Abstract A copolymerization process for copolymerising carbon monoxide and an olefin employs a catalyst comprising a Group VIII metal, for example palladium, and a bidentate ligand having general formula $R^1R^2M^1-R-M^2R^3R^4$ where R represents a bridging group, M^1 and R^2 represent nitrogen, arsenic, antimony or, preferably phosphorus, and R^1 , R^2 , R^3 and R^4 preferably represent phenyl groups each having an alkoxy substituent and a sulphonyl substituent $-SO_2-OH$ or a salt or ester derivative. Such catalysts afford good reaction rates and good recycling properties.		