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(21) International Application Number: PCT/US00/01040 (22) International Filing Date: 14 January 2000 (14.01.00) (30) Priority Data: 09/233,353 19 January 1999 (19.01.99) US (71) Applicant: EXXONMOBIL RESEARCH AND ENGINEERING COMPANY [US/US]; 180 Park Avenue, P.O. Box 390, Florham Park, NJ 07932-0390 (US). (72) Inventors: PATIL, Abhimanyu, Onkar; 12 Evergreen Court, Westfield, NJ 07090 (US). SCHULZ, Donald, Norman; 36 Valley Crest Road, Annandale, NJ 08801 (US). COOK, Raymond, Arnold; 2419 South Court, Bethlehem, PA 18017 (US). MATTURRO, Michael, Gerard; 41 York Street, Lambertville, NJ 08530 (US). (74) Agents: PURWIN, Paul, E. et al.; ExxonMobil Research and Engineering Company, P.O. Box 390, Florham Park, NJ 07932-0390 (US).		(81) Designated States: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, 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. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: POLYMERIZATION PROCESSES USING DILUTE MULTI-COMPONENT FEEDS		
(57) Abstract The invention relates to a method of forming carbon monoxide-containing polymers from multi-component syngas feeds and at least one vinyl comonomer. Feeds useful in the practice of the invention comprise ethylene in an amount ranging from about 5 to about 40 mole %, carbon monoxide in an amount ranging from about 1 to about 40 mole %, hydrogen in an amount ranging from about 4 to about 55 mole %, carbon dioxide in an amount ranging about 3 to about 10 mole %, and methane in an amount ranging from about 4 to about 85 mole %. The feed may also include acetylene in an amount ranging up to about 10 mole %. The feed may contain at least one free radical-polymerizable vinyl comonomer, or a cofeed containing such a comonomer can be used.		