

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
22 July 2021 (22.07.2021)



(10) International Publication Number
WO 2021/144178 A1

(51) International Patent Classification:
C08F 210/16 (2006.01) *C08F 2/06* (2006.01)

(21) International Application Number:
PCT/EP2021/050146

(22) International Filing Date:
07 January 2021 (07.01.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20152177.0 16 January 2020 (16.01.2020) EP

(71) Applicant: **BOREALIS AG** [AT/AT]; IZD Tower, Wagramer Str. 17-19, 1220 Vienna (AT).

(72) Inventor: **AL-HAJ ALI, Mohammad**; Borealis Polymers Oy, Muovintie 19, 06850 Kulloo (FI).

(74) Agent: **MAIWALD PATENTANWALTS- UND RECHTSANWALTSGESELLSCHAFT MBH**; Elisenhof, Elisenstraße 3, 80335 München (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,

SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: PROCESS FOR AVOIDING PHASE SEPARATION DURING SOLUTION POLYMERIZATION OF ETHYLENE-1-OCTENE COPOLYMERS

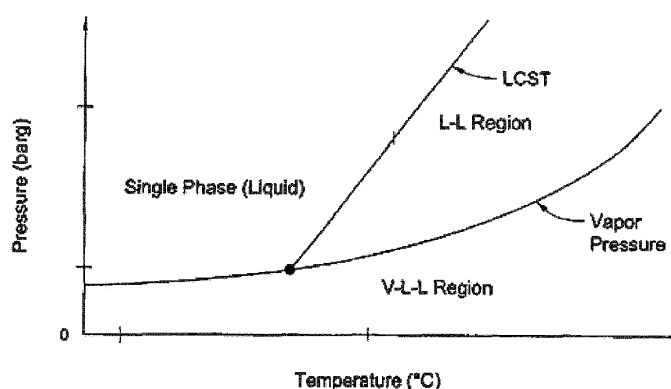


Fig 1

(57) Abstract: The present invention relates to a process for polymerizing ethylene-1-octene copolymers in a solution polymerization process by firstly modelling polymer systems for solution polymerization of ethylene-1-octene copolymers and then transferring pressure and temperature conditions from said modelled polymer systems to a solution polymerization process to ensure that the polymerized ethylene-1-octene copolymer is completely solved in the solvent during the polymerization process.

WO 2021/144178 A1