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(71) Applicants (for all designated States except US): **LINDE AG** [DE/DE]; Klosterhofstrasse 1, 80331 München (DE). **SAUDI BASIC INDUSTRIES CORPORATION** [SA/SA]; P.O. Box 5101, 11422 Riyadh (SA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FRITZ, Peter, M.** [DE/DE]; Truderinger Str. 21, 82009 Unterhaching (DE). **BÖLT, Heinz** [DE/DE]; Kanalstrasse 21, 82515 Wolfratshausen (DE). **MEISWINKEL, Andreas** [DE/DE]; Ludwigshöher Strasse 14, 81479 Munich (DE). **TAUBE, Carsten** [DE/DE]; Baldestrasse 31C, 85560 Ebersberg (DE). **WINKLER, Florian** [DE/DE]; Holzstrasse 49, 80469 Munich (DE). **GÖKE, Volker** [DE/DE]; Am Loisachbogen 7e, 82515 Wolfratshausen (DE). **MÜLLER, Wolfgang** [DE/DE]; Jaspérallee 36, 81245 Munich (DE). **WÖHL, Anina** [DE/DE]; Wolfratshausener Strasse 86a, 82049 Pullach (DE). **SCHNEIDER, Richard** [DE/DE]; Kirchtalstrasse 2B, 82449 Uffing (DE). **ROSENTHAL, Uwe** [DE/DE]; Hahnenkamp 9, 18069 Lambrechtshagen (DE). **FRITZ, Helmut** [DE/DE]; Zillertalstrasse 31, 81373 Munich (DE). **MÜLLER, Bernd, H.** [DE/DE]; Gellertstrasse 7, 18057 Rostock (DE). **PEULECKE, Normen** [DE/DE]; Vitus-Bering-Str. 34, 18106 Rostock (DE). **PEITZ, Stephan** [DE/DE]; Klosterbachstrasse 13, 18057 Rostock (DE).

ALURI, Bhaskar, Reddy [IN/DE]; Bergstr. 7a, Apartment 301, 18057 Rostock (DE). **AL-HAZMI, Mohammed** [SA/SA]; Saudi Basic Industries Corporation, P.O. Box 5101, 11422 Riyadh (SA). **AZAM, Shahid, Majeed** [IN/SA]; Saudi Basic Industries Corporation, Riyadh Industrial Area 2, Al-Kharj Road, P.O. Box 42503 (SA). **MOSA, Fuad** [SA/SA]; Saudi Basic Industries Corporation, Riyadh Industrial Area 2, Al-Kharj Road, P.O. Box 42503 (SA). **AL-DUGATHIER, Abdellah** [SA/SA]; Saudi Basic Industries Corporation, Riyadh Industrial Area 2, Al-Kharj Road, P.O. Box 42503 (SA).

(74) Agents: **SCHOLZ, Volker** et al.; Boehmert & Boehmert, Hollerallee 32, 28209 Bremen (DE).

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(54) Title: METHOD FOR PREPARING LINEAR ALPHA-OLEFINS

(57) Abstract: The present invention relates to a method for preparing linear alpha-olefins (LAO) by oligomerization of ethylene in the presence of a solvent and homogeneous catalyst, comprising the steps of: (i) feeding ethylene, solvent and catalyst into an oligomerization reactor, (ii) oligomerizing the ethylene in the reactor, (iii) removing a reactor outlet stream comprising solvent, linear alpha-olefins, optionally unreacted ethylene and catalyst from the reactor via a reactor outlet piping system, (iv) dosing at least one additive selected from the group consisting of alcohols, polyethylene glycols, polyethylene glycol monoethers, polyethylene glycol diethers, polyamines, amines, amino alcohols and surfactants, (v) transferring the reactor outlet stream containing the additive to a catalyst deactivation and removal section, and (vi) deactivating the catalyst with caustic and removing the deactivated catalyst from the reactor outlet stream, wherein the residence time of the additive in the reactor outlet stream prior to mixing with caustic is at least 1 second preferably at least 5 seconds, more preferably at least 10 seconds.

