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(71) **Applicant** (for all designated States except US): **EXXON-MOBIL CHEMICAL PATENTS INC.** [US/US]; A Corporation Of The State Of Delaware, 5200 Bayway Drive, Baytown, TX 77520 (US).

(72) **Inventors; and**

(75) **Inventors/Applicants** (for US only): **GOOSSENS, Ivo, T.** [BE/BE]; Merellaan 7, B-1880 Kapelle-Op-Den-Bos (BE). **CIANCIO, Fausto, F.** [BE/BE]; Veerle Heide 22, B-243 1C Veerle-Laakdal (BE). **CLYMANS, Paul, J.** [BE/BE]; Notenstraat 13, B-1880 Kapelle-Op-Den-Bos (BE). **CORNELISSEN, Philip, H.** [BE/BE]; B.J. Eerdekenstraat 25, B-3001 Heverlee (BE). **DE COSTER,**

Martin, J. [BE/BE]; Nieuwstraat 21 Diest., B-3290 Diest (BE). **DE KOSTER, WiUy** [BE/BE]; Molenstraat 28, B-1700 Dilbeek (BE). **LAMMENS, Henri, A.** [BE/BE]; Brugstraat 3, B-2060 Antwerpen (BE). **VAN NULAND, Tom** [BE/US]; 3392 Spencer Court, Baton Rouge, LA 70809 (US).

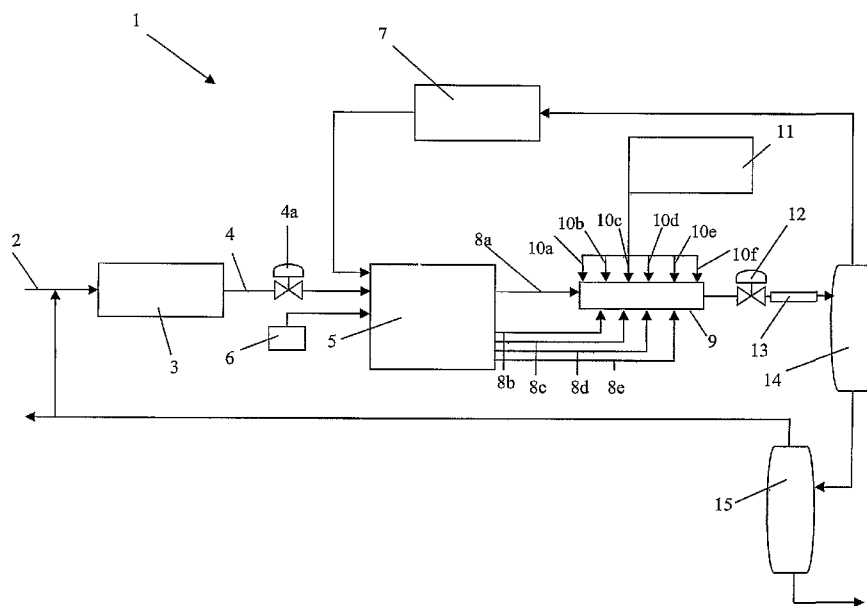
(74) **Agents:** **TREXLER, Amy, C.** et al.; Exxonmobil Chemical Company, P.O.Box 2149, Baytown, TX 77522-2149 (US).

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[Continued on next page]

(54) **Title:** PROCESS AND APPARATUS FOR MANUFACTURING ETHYLENE POLYMERS AND COPOLYMERS



(57) **Abstract:** The invention relates to a process for the manufacture of ethylene polymers and copolymers in which ethylene is compressed in a primary compressor at a throughput of at least 55 tonnes/hour, mixed with recycled ethylene and further compressed in a two-stage reciprocating secondary compressor having at least 14 cylinders to a pressure of at least 2300 bar at a throughput of at least 120 tonnes/hour, heating at least a portion of that ethylene to a temperature of at least 95°C and introducing it into a tubular reactor of diameter at least 65 mm and a length of at least 1500 m, introducing initiator in at least three reaction zones to give a conversion of at least 28% and maintaining a pressure drop over the reactor to maintain a flow velocity of at least 6 m/s.

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