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(71) Applicant (for all designated States except US): **BP CHEMICALS LIMITED** [GB/GB]; Britannic House, 1 Finsbury Circus, London EC2M 7BA (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HAGUE, Matthew** [GB/GB]; 6 Merchants Warehouse, Robinson Row, Hull HU1 2QX (GB). **LITTLE, Ian, Raymond** [GB/GB]; 188 Manor Road North, Thames Ditton, Surrey KT7 0BQ (GB). **SMITH, Warren, John** [GB/GB]; Endfield House, Ottringham, East Riding HU12 0DX (GB).

(74) Agent: **HYMERS, Ronald, Robson**; BP International Limited, Patents & Agreements, Chertsey Road, Sunbury-on-Thames, Middlesex TW16 7LN (GB).

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(54) Title: PROCESS FOR THE REMOVAL OF OXYGEN FROM OLEFIN-CONTAINING PROCESS STREAMS

(57) Abstract: There is a requirement to remove oxygen from olefin-containing process streams which comprise relatively low levels of oxygen, carbon monoxide, a relatively large amount of hydrogen and optionally at least one alkyne, especially from the product streams from auto-thermal cracking of hydrocarbons. A process for removal of oxygen from such streams, without significant hydrogenation of the olefin, comprises, contacting the gas mixture in a reaction zone with a catalyst comprising at least one metal or oxide of a metal selected from the group consisting of the 10th group and the 11th group of the Periodic Table of Elements, the metal or oxide of the metal being supported on an oxide support, provided that where the catalyst comprises at least one metal or oxide of a metal from the 10th group of the Periodic Table of Elements, the catalyst also comprises tin and provided that where the catalyst comprises at least one metal or oxide of a metal of the 11th group of the Periodic Table of Elements the oxide support is a zeolite.



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