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(54) Title: SHAPED CATALYST PARTICLES FOR HYDROCARBON SYNTHESIS

(57) Abstract: Shaped catalyst or catalyst precursor containing a catalytically active component or a precursor therefor, the component selected from elements of Group VIII of the Periodic Table of the Elements, supported on a carrier, which catalyst or catalyst precursor is an elongated shaped particle comprising three protrusions each extending from and attached to a central position, wherein the central position is aligned along the longitudinal axis of the particle, the cross-section of the particle occupying the space encompassed by the outer edges of six circles around a central circle, each of the six circles touching two neighbouring circles whilst three alternating circles are equidistant to the central circle and may be attached to the central circle, minus the space occupied by the three remaining outer circles and including the six interstitial regions. The invention further relates to a process to prepare the catalyst or catalyst precursor from a shapeable dough, to the die-plate used for the preparation of an extruded catalyst or catalyst precursor, to the use of the catalysts, as well as to hydrocarbons prepared by using the catalyst. The invention further relates to a process to obtain fuels and optionally base oils, by hydrogenation, hydroisomerisation and/or hydrocracking of the hydrocarbons prepared by using the catalyst.