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ACTION

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(54) Title: A REACTOR COMPRISING A PACKED BED OF SUPPORTED CATALYST OR SUPPORTED CATALYST PRECURSOR, AND A USE OF THE REACTOR

(57) Abstract: A reactor comprising a packed bed of supported catalyst or supported catalyst precursor wherein the supported catalyst or the supported catalyst precursor comprise an external surface comprising a catalytically active metal or a precursor compound thereof, and the packed bed has a void content of more than 50 %v and a specific surface area of more than 10 cm^2/cm^3, which is calculated as the total external surface area of the particles relative to the bed volume; the use of the said reactor in a chemical conversion process; a process for preparing hydrocarbons from syngas, which process comprises contacting a mixture of carbon monoxide and hydrogen in the said reactor, on the understanding that the catalytically active metal is a Group VIII metal which is at least in part present in metallic form; a packed bed of catalyst particles or catalyst precursor particles; and a catalyst particle or catalyst precursor particle.