

Title (en)  
PROCESS AND PLANT FOR PRODUCING ONE OR MORE HYDROCARBONS

Title (de)  
VERFAHREN UND ANLAGE ZUR HERSTELLUNG EINES ODER MEHRERER KOHLENWASSERSTOFFE

Title (fr)  
PROCÉDÉ ET INSTALLATION POUR PRODUIRE UN OU PLUSIEURS HYDROCARBURES

Publication  
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Application  
**EP 21806224 A 20211104**

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Abstract (en)  
[origin: WO2022096592A1] The invention relates to a process (100) for producing one or more hydrocarbons, in which process carbon dioxide and/or carbon monoxide is at least partially reacted in a first reaction step with hydrogen in a process gas flow (1), which is fed to a reactor assembly, to give one or more oxygenates which pass(es) into the process gas flow (1), and in which process the one or more oxygenates in the process gas flow (1) is or are at least partially reacted in a second reaction step to give one or more hydrocarbons which pass(es) into the process gas flow (1). The process gas flow (1) is guided in a flow direction through the reactor assembly and the reactor assembly has one or more reactor(s) (10) which has or have a first reaction zone (11) and a second reaction zone (12). The second reaction zone (12) is situated downstream of the first reaction zone (11) in the flow direction, and the first reaction zone (11) and the second reaction zone (12) are equipped with catalysts so that: the first and the second reaction steps are catalysed in the first reaction zone (11); the second reaction step is catalysed in the second reaction zone; and the first reaction step is not catalysed in the second reaction zone (12), or is catalysed to a lesser extent than in the first reaction zone (11). The present invention also relates to a corresponding plant.

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