

Title (en)
METHOD AND FACILITY FOR PRODUCING A TARGET COMPOUND

Title (de)
VERFAHREN UND ANLAGE ZUR HERSTELLUNG EINER ZIELVERBINDUNG

Title (fr)
PROCÉDÉ ET INSTALLATION POUR LA PRODUCTION D'UN COMPOSÉ CIBLE

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Application
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Abstract (en)
[origin: WO2021009310A1] The invention relates to a method (100) for producing a target compound, wherein a first gas mixture is provided which contains at least one olefin with a first carbon number and carbon monoxide, and a second gas mixture, which is formed using at least part of the first gas mixture and contains at least the olefin with the first carbon number, hydrogen, and carbon monoxide, is subjected to one or more reaction steps, thereby obtaining a third gas mixture, which contains a compound with a second carbon number and at least carbon monoxide. The one or more reaction steps include a hydroformylation process (2), and the second carbon number is greater than the first carbon number by one. According to the invention, a carbon monoxide-enriched fourth gas mixture is formed using at least part of the third gas mixture, said fourth gas mixture being depleted of the compound with three carbon atoms in comparison to the third gas mixture; the carbon monoxide in at least one part of the fourth gas mixture is subjected to a water-gas shift reaction (3), thereby forming hydrogen and carbon dioxide; and the hydrogen formed in the water-gas shift reaction is used in the formation of the second gas mixture. The invention likewise relates to a corresponding facility.

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