

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

Publication

**EP 3999485 A1 20220525 (DE)**

Application

**EP 20742714 A 20200716**

Priority

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Abstract (en)

[origin: WO2021009312A1] The invention relates to a method (100) for producing a target compound, wherein an outlet gas mixture is provided in particular by oxidatively coupling methane, said outlet gas mixture containing an olefin, carbon monoxide, carbon dioxide, and optionally hydrogen, and the olefin together with the carbon monoxide and hydrogen in at least one part of the outlet mixture is subjected to a hydroformylation process (2), thereby obtaining an aldehyde. The paraffin and the olefin have a carbon chain with a first carbon number, and the aldehyde has a carbon chain with a second carbon number which is greater than the first carbon number by one. The carbon dioxide contained in the outlet mixture is at least partly separated upstream and/or downstream of the hydroformylation process. According to the invention, at least the separated carbon dioxide is subjected to a dry reformation process (3) at least partly using methane, thereby obtaining carbon monoxide, and the carbon monoxide subjected to the hydroformylation process (2) comprises at least one part of the carbon monoxide obtained in the dry reformation process (3). The invention likewise relates to a corresponding facility.

IPC 8 full level

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C-Set (source: CN EP)

CN

1. **C07C 45/50 + C07C 47/02**
2. **C07C 2/82 + C07C 11/04**
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EP

1. **C07C 45/50 + C07C 47/02**
2. **C07C 2/82 + C07C 11/04**

Citation (search report)

See references of WO 2021009312A1

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