

Title (en)  
REACTOR FOR THE CONVERSION OF CARBON DIOXIDE

Title (de)  
REAKTOR ZUR UMWANDLUNG VON KOHLENDIOXID

Title (fr)  
REACTEUR POUR LA CONVERSION DU DIOXYDE DE CARBONE

Publication  
**EP 3897961 A1 20211027 (FR)**

Application  
**EP 19827748 A 20191220**

Priority  
• FR 1874033 A 20181221  
• EP 2019086743 W 20191220

Abstract (en)  
[origin: WO2020128009A1] The present invention concerns a reactor for the conversion of carbon dioxide or carbon monoxide into hydrocarbon and/or alcohol comprising a support made from an electrically and thermally conductive material, forming the wall or walls of at least one longitudinal channel that passes through the support and also acting as the cathode of the reactor, at least one wire electrode forming an anode of the reactor, and extending within each longitudinal channel, and being arranged at a distance from the wall or walls of the longitudinal channel, each wire electrode optionally being covered with an electrically insulating layer along the part of the wire electrode extending within the longitudinal channel, a catalyst capable of catalysing a conversion reaction for the conversion of carbon dioxide or carbon monoxide into hydrocarbon and/or alcohol, the catalyst being situated between the wire electrode and the wall or walls of each longitudinal channel.

IPC 8 full level  
**B01J 19/08** (2006.01); **B01J 8/06** (2006.01); **B01J 12/00** (2006.01); **B01J 19/24** (2006.01); **C07C 1/12** (2006.01); **C07C 9/04** (2006.01); **C10L 3/08** (2006.01); **H05H 1/24** (2006.01)

CPC (source: EP US)  
**B01J 8/06** (2013.01 - EP US); **B01J 19/088** (2013.01 - EP US); **B01J 19/2415** (2013.01 - EP); **B01J 19/242** (2013.01 - EP US); **B01J 23/755** (2013.01 - US); **C07C 1/041** (2013.01 - EP US); **C07C 1/12** (2013.01 - EP US); **C07C 29/152** (2013.01 - US); **C07C 29/156** (2013.01 - US); **H05H 1/2406** (2013.01 - EP US); **H05H 1/2431** (2021.05 - EP US); **H05H 1/2443** (2021.05 - EP); **H05H 1/245** (2021.05 - US); **B01J 2219/0809** (2013.01 - EP US); **B01J 2219/0815** (2013.01 - EP US); **B01J 2219/0828** (2013.01 - EP US); **B01J 2219/083** (2013.01 - EP US); **B01J 2219/0841** (2013.01 - EP US); **B01J 2219/0849** (2013.01 - EP US); **B01J 2219/0871** (2013.01 - EP US); **B01J 2219/0875** (2013.01 - EP US); **B01J 2219/0892** (2013.01 - EP US); **B01J 2219/0896** (2013.01 - EP US); **B01J 2219/182** (2013.01 - EP US); **B01J 2219/1943** (2013.01 - EP US); **B01J 2219/2408** (2013.01 - EP US); **B01J 2219/2411** (2013.01 - EP US); **B01J 2219/243** (2013.01 - EP US); **C07C 2521/04** (2013.01 - EP); **C07C 2523/46** (2013.01 - EP); **C07C 2523/755** (2013.01 - US); **C10L 3/08** (2013.01 - EP); **C10L 2290/38** (2013.01 - EP); **H05H 2245/15** (2021.05 - EP US)

Citation (search report)  
See references of WO 2020128009A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020128009 A1 20200625**; CN 113811384 A 20211217; CN 113811384 B 20231003; EP 3897961 A1 20211027; FR 3090409 A1 20200626; FR 3090409 B1 20230414; US 2022040664 A1 20220210

DOCDB simple family (application)  
**EP 2019086743 W 20191220**; CN 201980092582 A 20191220; EP 19827748 A 20191220; FR 1874033 A 20181221; US 201917416225 A 20191220