

Title (en)
THERMAL INTEGRATION OF AN ELECTRICALLY HEATED REACTOR

Title (de)
WÄRMEINTEGRATION EINES ELEKTRISCH BEHEIZTEN REAKTORS

Title (fr)
INTÉGRATION THERMIQUE D'UN RÉACTEUR CHAUFFÉ ÉLECTRIQUEMENT

Publication
EP 4221886 A1 20230809 (DE)

Application
EP 21783012 A 20211001

Priority
• EP 20199922 A 20201002
• EP 2021077144 W 20211001

Abstract (en)
[origin: WO2022069726A1] The invention relates to a system (110) for producing reaction products. The system (110) has at least one preheater (114). The system (110) has at least one feedstock supply (118) which is designed to supply at least one feedstock to the preheater (114). The preheater (114) is designed to pre-heat the feedstock to a predetermined temperature. The system (110) has at least one electrically heatable reactor (122). The electrically heatable reactor (122) is designed to at least partially react the preheated feedstock to yield reaction products and by-products. The system (110) has at least one thermal integration device (132) which is designed to supply at least part of the by-products to the preheater (114). The preheater (114) is designed to use the by-products to provide at least part of the energy required for preheating the feedstock.

IPC 8 full level
B01J 19/24 (2006.01); **C10G 9/24** (2006.01); **C10G 15/08** (2006.01); **C10G 32/02** (2006.01); **C10G 35/16** (2006.01)

CPC (source: EP KR US)
B01J 19/0013 (2013.01 - US); **B01J 19/24** (2013.01 - EP KR); **B01J 19/2465** (2013.01 - US); **C01B 3/346** (2013.01 - US); **C10G 9/24** (2013.01 - EP KR); **C10G 9/36** (2013.01 - US); **C10G 15/08** (2013.01 - EP KR); **C10G 32/02** (2013.01 - EP KR); **C10G 35/16** (2013.01 - EP KR); **C10J 1/26** (2013.01 - US); **B01J 2208/00389** (2013.01 - EP KR); **B01J 2208/00433** (2013.01 - EP KR); **B01J 2208/0053** (2013.01 - EP KR); **B01J 2219/00087** (2013.01 - US); **B01J 2219/00108** (2013.01 - US); **B01J 2219/0011** (2013.01 - US); **B01J 2219/00128** (2013.01 - US); **B01J 2219/00132** (2013.01 - EP KR); **B01J 2219/00135** (2013.01 - US); **B01J 2219/00139** (2013.01 - EP KR); **B01J 2219/00159** (2013.01 - EP KR US); **C01B 2203/0233** (2013.01 - US); **C01B 2203/0838** (2013.01 - US); **C01B 2203/085** (2013.01 - US); **C01B 2203/0883** (2013.01 - US); **C01B 2203/0894** (2013.01 - US); **C01B 2203/1241** (2013.01 - US); **C01B 2203/1247** (2013.01 - US); **C01B 2203/1252** (2013.01 - US); **C10G 2300/1025** (2013.01 - EP KR); **C10G 2300/104** (2013.01 - EP KR); **C10G 2300/1044** (2013.01 - EP KR); **C10G 2300/4081** (2013.01 - EP KR); **C10G 2400/20** (2013.01 - EP KR); **C10G 2400/22** (2013.01 - US); **C10G 2400/30** (2013.01 - US)

Citation (search report)
See references of WO 2022069726A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022069726 A1 20220407; CA 3197697 A1 20220407; CN 116323867 A 20230623; EP 4221886 A1 20230809; JP 2023547332 A 20231110; KR 20230083297 A 20230609; US 2023356171 A1 20231109

DOCDB simple family (application)
EP 2021077144 W 20211001; CA 3197697 A 20211001; CN 202180067595 A 20211001; EP 21783012 A 20211001; JP 2023520315 A 20211001; KR 20237014157 A 20211001; US 202118029385 A 20211001