

Title (en)

Regeneration of catalyst used in the conversion of carbo-metallic containing residual oils.

Title (de)

Regeneration eines Katalysators, der bei der Konversion carbo-metallischer Rückstandsöle verwendet werden ist.

Title (fr)

Régénération d'un catalyseur utilisé pour la conversion d'huiles résiduelles carbo-métalliques.

Publication

EP 0092065 A1 19831026 (EN)

Application

EP 83102928 A 19830324

Priority

US 36986082 A 19820419

Abstract (en)

Steam (25) is added to the air that passes through the dense bed of the deactivated coked catalyst. Steam acts by removing adsorbed heavy hydrocarbons and reacting with the coke to yield carbon monoxide. The overall effect is to lower the regenerator temperature by removing oxidizable material and convert coke to carbon monoxide and hydrogen via endothermic reaction. This allows operation at higher Conradson carbon feed (10-14% Conradson carbon). Air (42) is added at the bottom of the lower regenerator (34) and also an additional air inlet is placed in the upper part of the lower regenerator section.

IPC 1-7

C10G 11/14

IPC 8 full level

C10G 11/05 (2006.01); **C10G 11/18** (2006.01)

CPC (source: EP)

C10G 11/05 (2013.01); **C10G 11/182** (2013.01)

Citation (search report)

- US 4336160 A 19820622 - DEAN ROBERT R, et al
- US 4274942 A 19810623 - BARTHOLIC DAVID B, et al
- US 4062759 A 19771213 - CASTAGNOS JR LEONCE F, et al
- US 4056486 A 19771101 - BUNN JR DORRANCE P, et al
- GB 2001545 A 19790207 - ICI LTD
- GB 1569467 A 19800618 - TEXACO DEVELOPMENT CORP

Cited by

FR2628342A1; DE10209563A1; EP2072606A1; EP0152845A1; EP1241154A3; FR2705142A1; US5773379A; EP0323784A1; FR2625748A1; EP0332536A1; US4965232A; US2010298117A1; US8822363B2; US7699974B2; US7699975B2; WO9426845A1; WO2007149922A1; US7767075B2; US7935245B2; US7811446B2; US7921631B2; US7932204B2

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0092065 A1 19831026; EP 0092065 B1 19860723; CA 1183826 A 19850312; DE 3364626 D1 19860828

DOCDB simple family (application)

EP 83102928 A 19830324; CA 424732 A 19830329; DE 3364626 T 19830324