

Title (en)

REMOVAL OF ARSENIC FROM FLUE-GAS

Title (de)

ENTFERNUNG VON ARSEN AUS RAUCHGAS

Title (fr)

ÉLIMINATION DE L'ARSENIC DES GAZ DE COMBUSTION

Publication

EP 3548163 A1 20191009 (EN)

Application

EP 17808482 A 20171205

Priority

- EP 16202195 A 20161205
- EP 2017081435 W 20171205

Abstract (en)

[origin: WO2018104257A1] The divulged invention concerns a process for the removal of arsenic oxides in process exhaust gases, comprising the step of passing the exhaust gases through a supported ionic liquid phase bed, characterized in that the ionic liquid comprises one or more cations from the list consisting of substituted phosphonium, ammonium, imidazolium, pyrrolidinium, and pyridinium, and one or more anions from the list consisting of chloride, bromide, and carboxylate. Compared to a bed of active carbon, the ionic liquid soaked active carbon bed according to the invention allows for an estimated doubling of the arsenic adsorption capacity of the bed, while also considerably enhancing the kinetics of adsorption.

IPC 8 full level

B01D 53/64 (2006.01)

CPC (source: EA EP KR)

B01D 53/025 (2013.01 - KR); **B01D 53/64** (2013.01 - EA EP KR); **B01J 20/22** (2013.01 - EA EP KR); **B01J 20/28066** (2013.01 - EA EP KR); **B01J 20/28073** (2013.01 - EA EP KR); **B01J 20/28083** (2013.01 - EA EP KR); **B01J 20/3204** (2013.01 - EA EP KR); **B01J 20/3287** (2013.01 - EA EP KR); **B01D 53/025** (2013.01 - EA EP); **B01D 2252/30** (2013.01 - EA EP KR); **B01D 2253/102** (2013.01 - EA EP KR); **B01D 2253/25** (2013.01 - EA EP KR); **B01D 2253/306** (2013.01 - EA EP KR); **B01D 2258/025** (2013.01 - EA EP KR); **B01D 2258/0283** (2013.01 - EA EP KR)

Citation (search report)

See references of WO 2018104257A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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