

Title (en)

SOOT AVOIDANCE AND/OR SOOT REDUCTION PROCESS AND ASSEMBLY

Title (de)

RUSSVERMEIDUNGS- UND/ODER RUSSVERMINDERUNGSVERFAHREN SOWIE -ANORDNUNG

Title (fr)

PROCÉDÉ ET SYSTÈME POUR ÉVITER ET/OU RÉDUIRE LA QUANTITÉ DE SUIE

Publication

**EP 3638620 A1 20200422 (DE)**

Application

**EP 18730971 A 20180611**

Priority

- EP 17175569 A 20170612
- DE 2018100553 W 20180611

Abstract (en)

[origin: CA3067060A1] The invention relates to a soot avoidance and/or soot reduction process for avoidance and/or reduction of soot inside a synthesis gas and/or CO-containing gas production apparatus from the feed gases carbon dioxide, steam, hydrogen and/or a hydrocarbon-containing residual gas and electrical energy in RWGS processes, electrolyses for electrochemical decomposition of carbon dioxide and/or steam, reforming operations and/or synthesis gas production processes having at least one gas production unit, an electrolysis stack and/or a heater-reactor combination for performing an RWGS reaction and at least one cooling sector/recuperator for CO-containing gas and/or synthesis gas and to a soot avoidance and/or soot reduction assembly.

IPC 8 full level

**C01B 3/12** (2006.01); **C01B 3/34** (2006.01); **C25B 1/00** (2006.01)

CPC (source: EP US)

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**C01B 3/34** (2013.01 - EP); **C25B 1/00** (2013.01 - EP US); **C25B 15/02** (2013.01 - US); **B01J 2219/00135** (2013.01 - US);  
**B01J 2219/00247** (2013.01 - US); **C01B 2203/0872** (2013.01 - US); **C01B 2203/0883** (2013.01 - EP); **C01B 2203/0888** (2013.01 - EP);  
**C01B 2203/0894** (2013.01 - EP); **C25B 1/02** (2013.01 - EP); **C25B 15/08** (2013.01 - EP); **Y02E 60/36** (2013.01 - EP); **Y02P 20/00** (2015.11 - EP)

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See references of WO 2018228642A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3415466 A1 20181219**; AU 2018283056 A1 20191219; AU 2018283056 B2 20200716; BR 112019022352 A2 20200519;  
CA 3067060 A1 20181220; CA 3067090 A1 20181220; CA 3067090 C 20230221; EP 3638619 A1 20200422; EP 3638620 A1 20200422;  
US 11612872 B2 20230328; US 2020179897 A1 20200611; WO 2018228641 A1 20181220; WO 2018228642 A1 20181220;  
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**EP 17175569 A 20170612**; AU 2018283056 A 20180611; BR 112019022352 A 20180611; CA 3067060 A 20180611;  
CA 3067090 A 20180611; DE 2018100552 W 20180611; DE 2018100553 W 20180611; EP 18730970 A 20180611; EP 18730971 A 20180611;  
US 201816616545 A 20180611; ZA 201906574 A 20191003