

Title (en)
METHOD FOR THE DRY FILTRATION OF A GAS FLOW THAT CARRIES FOREIGN BODIES, AND FILTER DEVICE FOR CLEANING CRUDE GAS THAT CARRIES FOREIGN BODIES

Title (de)
VERFAHREN ZUR TROCKENFILTRATION EINES FREMDKÖRPER MITFÜHRENDEN GASSTROMS, UND FILTERVORRICHTUNG ZUR REINIGUNG VON FREMDKÖRPER MITFÜHRENDEM ROHGAS

Title (fr)
PROCÉDÉ DE FILTRATION À SEC D'UN ÉCOULEMENT DE GAZ CONTENANT DES CORPS ÉTRANGERS, ET DISPOSITIF DE FILTRATION POUR LE NETTOYAGE DE GAZ BRUT PORTANT DES CORPS ÉTRANGERS

Publication
EP 4096807 A1 20221207 (DE)

Application
EP 21701692 A 20210114

Priority

- DE 102020102036 A 20200128
- DE 102020103982 A 20200214
- DE 102020112856 A 20200512
- EP 2021050704 W 20210114

Abstract (en)
[origin: WO2021151681A1] A dry filtration process for a gas flow (44) that carries foreign bodies, in particular in a filter device for purifying waste gas produced in additive manufacturing techniques, said process comprising: feeding a crude gas flow (44) containing foreign bodies into a crude gas chamber (15) of a filter unit, which has at least one filter surface separating a crude gas side from a clean gas side; feeding an oxidant (112) into a reaction region, which lies downstream of the filter surface on the crude gas side, such that foreign bodies contained in the material cleaned from the filter surface and/or the crude gas flow (44) react with the oxidant (112) in the reaction region to form foreign bodies containing oxides.

IPC 8 full level
B01D 46/00 (2022.01); **B01D 45/02** (2006.01); **B01D 46/48** (2006.01); **B01D 50/00** (2022.01); **B33Y 40/00** (2020.01)

CPC (source: EP US)
B01D 45/02 (2013.01 - EP); **B01D 46/0093** (2013.01 - EP US); **B01D 46/4263** (2013.01 - US); **B01D 46/48** (2013.01 - EP US); **B01D 46/66** (2022.01 - EP); **B01D 46/84** (2022.01 - US); **B01D 50/20** (2022.01 - EP); **B01D 53/76** (2013.01 - US); **B01J 20/043** (2013.01 - US); **B01J 20/103** (2013.01 - US); **B01J 20/28004** (2013.01 - US); **B01J 20/28021** (2013.01 - US); **B22F 12/70** (2021.01 - US); **B33Y 10/00** (2014.12 - EP); **B33Y 40/00** (2014.12 - EP US); **B01D 2251/10** (2013.01 - US); **B01D 2258/02** (2013.01 - US); **B01D 2273/12** (2013.01 - US); **B01D 2273/20** (2013.01 - US); **B22F 10/77** (2021.01 - EP); **B22F 12/70** (2021.01 - EP); **B22F 12/80** (2021.01 - EP); **B22F 2999/00** (2013.01 - EP US); **Y02P 10/25** (2015.11 - EP)

Citation (search report)
See references of WO 2021151681A1

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DE 102020112861 A1 20210729; CN 115243782 A 20221025; CN 115243783 A 20221025; DE 102020112856 A1 20210729; EP 4096806 A1 20221207; EP 4096807 A1 20221207; JP 2023512045 A 20230323; JP 2023525427 A 20230616; US 2023079987 A1 20230316; US 2023330581 A1 20231019; WO 2021151680 A1 20210805; WO 2021151681 A1 20210805

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DE 102020112861 A 20200512; CN 202180019471 A 20210114; CN 202180019807 A 20210114; DE 102020112856 A 20200512; EP 2021050701 W 20210114; EP 2021050704 W 20210114; EP 21701692 A 20210114; EP 21702369 A 20210114; JP 2022546077 A 20210114; JP 2022546080 A 20210114; US 202117796095 A 20210114; US 202117796106 A 20210114