

Title (en)  
COUNTER FLOW HEAT EXCHANGER WITH FORCED GAS/AIR GUIDANCE

Title (de)  
GEGENSTROM WÄRMETAUSCHER FÜR STAUBBELADENES ABGAS METALLURGISCHER ANLAGEN

Title (fr)  
ÉCHANGEUR DE CHALEUR À CONTRE-COURANT AVEC GUIDAGE FORCÉ DU GAZ/DE L'AIR

Publication  
**EP 3123092 A2 20170201 (DE)**

Application  
**EP 15741781 A 20150324**

Priority  
• EP 14161227 A 20140324  
• EP 2015056171 W 20150324

Abstract (en)  
[origin: WO2015144651A2] The invention relates to a method for cooling dust-laden exhaust gas from a metallurgical installation. The problem addressed by the invention is that of creating a method and a device for cooling dust-laden hot exhaust gas from a metallurgical installation by means of indirect heat transfer. The problem is solved by means of a method in which the exhaust gas is cooled by a cooling gas by means of indirect heat transfer and the exhaust gas is fed to the cooling process at a temperature above 650°C. The flow direction of the cooling gas is changed at least once. Preferably, the flow direction is reversed. The exhaust gas is cooled in accordance with the counterflow principle.

IPC 8 full level  
**F28D 7/00** (2006.01)

CPC (source: CN EP RU)  
**F27D 17/00** (2013.01 - RU); **F28D 7/06** (2013.01 - CN EP); **F28D 7/10** (2013.01 - CN EP); **F28D 7/1607** (2013.01 - CN EP);  
**F28F 19/00** (2013.01 - CN EP); **F28G 7/00** (2013.01 - CN EP); **F28F 2250/102** (2013.01 - EP); **F28F 2250/104** (2013.01 - EP)

Citation (search report)  
See references of WO 2015144651A2

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

DOCDB simple family (publication)  
**EP 2924384 A1 20150930**; CN 106461358 A 20170222; EP 3123092 A2 20170201; EP 3123092 B1 20190508; RU 2016137902 A 20180426;  
RU 2016137902 A3 20181113; RU 2677555 C2 20190117; TR 201909188 T4 20190722; WO 2015144651 A2 20151001;  
WO 2015144651 A3 20151119

DOCDB simple family (application)  
**EP 14161227 A 20140324**; CN 201580016010 A 20150324; EP 15741781 A 20150324; EP 2015056171 W 20150324;  
RU 2016137902 A 20150324; TR 201909188 T 20150324