

Title (en)  
AIR CURTAIN

Title (de)  
LUFTVORHANG

Title (fr)  
RIDEAU D'AIR

Publication  
**EP 2531778 A1 20121212 (EN)**

Application  
**EP 10805722 A 20101215**

Priority  
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Abstract (en)  
[origin: GB2470974A] The invention provides a railway tunnel ventilation apparatus which significantly enhances the piston effect of an underground train moving a column of air from a single track underground tunnel into a station platform area where it is naturally but indirectly replaced by fresh air from the surface. The apparatus comprises a ventilation car V having the same cross-section as a train carriage 100. An onboard air curtain generator draws air from both ends of the car V and ejects it as continuous air curtains extending in use from the outer periphery of the car V to the tunnel internal surface. The air curtains act as a barrier to air flowing past the car V in the space between the carriage and tunnel, so that the air curtain assists in the driving of a column of air ahead of the train.

IPC 8 full level  
**B61D 27/00** (2006.01); **E21F 1/00** (2006.01); **F24F 9/00** (2006.01)

CPC (source: EP GB)  
**B61D 15/00** (2013.01 - GB); **B61D 27/009** (2013.01 - EP); **E21F 1/00** (2013.01 - GB); **E21F 1/003** (2013.01 - EP GB); **F24F 9/00** (2013.01 - EP)

Citation (search report)  
See references of WO 2011092448A1

Cited by  
CN114575908A

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