

Title (en)

AN APPARATUS AND A METHOD FOR HUMIDIFYING A GAS

Title (de)

VORRICHTUNG UND VERFAHREN ZUM BEFEUCHTEN EINES GASES

Title (fr)

APPAREIL ET PROCÉDÉ D'HUMIDIFICATION DE GAZ

Publication

EP 4386272 A1 20240619 (EN)

Application

EP 22306853 A 20221212

Priority

EP 22306853 A 20221212

Abstract (en)

An apparatus (10) for humidifying a gas comprises a gas flow passage (20) along a top-to-bottom direction (D), with a gas inlet (22) opening towards a gas outlet (24), a heat exchange structure (34) between the gas inlet and outlet, a heat source (32) configured for heating the heat exchange structure (34), a liquid pouring device (50) within the gas flow passage between the gas inlet and the heat exchange structure for pouring a liquid downwards onto an upper end (52) of the heat exchange structure (34) such that said liquid wets the heat exchange structure where the latter delimits portions (36) of the gas flow passage, and a liquid inlet (54) for supplying the liquid pouring device with said liquid. The apparatus enables evaporation of at least part of the liquid into said gas within the portions of the gas flow passage delimited by the heat exchange structure.

IPC 8 full level

F24F 6/08 (2006.01); **F24F 6/10** (2006.01); **F25B 39/04** (2006.01); **F28D 5/02** (2006.01)

CPC (source: EP)

F24F 6/08 (2013.01); **F24F 6/10** (2013.01); **F25B 39/04** (2013.01); **F28D 5/02** (2013.01); **F24F 2110/40** (2017.12)

Citation (search report)

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- [X] US 4404814 A 19830920 - BEASLEY ALBERT W [US], et al
- [X] FR 1012988 A 19520721
- [A] US 2021325059 A1 20211021 - ISHIDA KOZO [JP], et al
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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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

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