Title (en)

FLOOD PROTECTION FOR UNDERGROUND AIR VENTS

Title (de)

HOCHWASSERSCHUTZ FÜR UNTERIRDISCHE BELÜFTUNGSÖFFNUNGEN

Title (fr)

PROTECTION CONTRE L'INONDATION POUR ÉVENTS D'AÉRATION SOUTERRAINS

Publication

EP 3485117 A4 20200401 (EN)

Application

EP 17828569 A 20170714

Priority

- US 201662363024 P 20160715
- US 2017042234 W 20170714

Abstract (en)

[origin: WO2018013974A1] Apparatus allowing ventilation through a ventilation shaft to an underground ventilation duct fluidly communicating through the ventilation shaft to an atmospheric opening of the shaft and on threat of flooding operable to prevent downward flow of surface water into the ventilation duct includes support sidewalls fitting in the shaft providing a ventilation passage between support top and bottom openings and a suspension member supported on opposed lateral sidewalls proximate the top opening holding one or more hinge connected panels that manually release to rotationally close the passage and are manually rotationally liftable to a home position allowing ventilation. A panel drain automatically closes when the panel is raised to home position so it is already closed when the panel is released to rotationally close the passage.

IPC 8 full level

E04H 9/14 (2006.01); **E02B 7/20** (2006.01); **E02B 7/22** (2006.01); **E02D 19/02** (2006.01); **E05F 1/00** (2006.01); **E05F 5/00** (2017.01); **E06B 3/38** (2006.01); **E06B 5/00** (2006.01); **E06B 7/02** (2006.01); **E06B 7/14** (2006.01); **E21F 1/08** (2006.01); **F24F 7/04** (2006.01); **F24F 7/06** (2006.01); **F24F 13/02** (2006.01); **F24F 13/14** (2006.01); **G08B 5/02** (2006.01)

CPC (source: EP)

E21F 1/003 (2013.01); **E21F 1/08** (2013.01); E06B 2009/007 (2013.01); F24F 13/02 (2013.01)

Citation (search report)

- [A] WO 2015051352 A1 20150409 - WATERS LOUIS A [US]
- See references of WO 2018013981A2

Designated contracting state (EPC)

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