

Title (en)
A FLUID ACTUATED FLUID EXTRACTION SYSTEM

Title (de)
FLÜSSIGKEITSBETÄTIGTES FLÜSSIGKEITSEXTRAKTIONSSYSTEM

Title (fr)
SYSTÈME D'EXTRACTION DE FLUIDE ACTIONNÉ PAR FLUIDE

Publication
EP 3247950 A1 20171129 (EN)

Application
EP 16763066 A 20160909

Priority
• GB 201516110 A 20150911
• EP 2016071373 W 20160909

Abstract (en)
[origin: GB2542185A] A fluid actuated (natural wind) fluid (air) extraction system 10 comprises a hollow cylindrical body 12 having at least a pair of concentric annular baffles 14, 16, 18, 20 longitudinally spaced from one another thereby defining an annular flow channel 22, 24, 26 between the pair of baffles and into which an actuating fluid flows. An intake (28, fig 2) through which an exhaust fluid (room air) enters the body. The baffles are profiled to generate a vortex within an upstream portion of the flow channel and propagate the vortex circumferentially around the channel by means of the coanda effect. The baffles may be curved convergent and divergent form and comprises a lower edge 34, a throat 38 and an upper edge 36. The lower edge has a larger diameter than the upper edge and the throat has a smaller diameter than the upper edge. Adjacent baffles may overlap longitudinally and radially. A lower edge of the baffles may have an array of circumferential apertures 40. A frame 32 may secure each baffle relative to one another. The system may comprise a fan to supplement natural flow. One or more sensors may monitor environmental conditions and ventilation controlled accordingly.

IPC 8 full level
F24F 7/007 (2006.01); **F24F 7/04** (2006.01); **F24F 7/06** (2006.01); **F24F 11/00** (2006.01); **F24F 13/04** (2006.01); **F24F 13/06** (2006.01)

CPC (source: EP GB US)
F24F 7/00 (2013.01 - GB); **F24F 7/007** (2013.01 - EP GB US); **F24F 7/02** (2013.01 - GB); **F24F 7/025** (2013.01 - GB);
F24F 13/081 (2013.01 - GB); **F24F 11/30** (2017.12 - GB); **F24F 11/33** (2017.12 - GB); **F24F 11/34** (2017.12 - GB); **F24F 2007/004** (2013.01 - GB);
F24F 2011/0002 (2013.01 - EP US); **F24F 2013/0616** (2013.01 - EP US); **F24F 2110/10** (2017.12 - GB); **F24F 2110/20** (2017.12 - GB);
F24F 2221/28 (2013.01 - EP US)

Citation (search report)
See references of WO 2017042371A1

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)
GB 201516110 D0 20151028; **GB 2542185 A 20170315**; AR 105994 A1 20171129; EP 3247950 A1 20171129; US 2018283713 A1 20181004;
WO 2017042371 A1 20170316

DOCDB simple family (application)
GB 201516110 A 20150911; AR P160102782 A 20160912; EP 16763066 A 20160909; EP 2016071373 W 20160909;
US 201615758856 A 20160909