

(12) International Application Status Report

Received at International Bureau: 04 October 2018 (04.10.2018)

Information valid as of: 07 January 2019 (07.01.2019)

Report generated on: 16 July 2019 (16.07.2019)

(10) Publication number:

WO2019/060965

(43) Publication date:

04 April 2019 (04.04.2019)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/AU2018/051066

(22) Filing Date:

28 September 2018 (28.09.2018)

(25) Filing language:

English (EN)

(31) Priority number(s):

2017903960 (AU)

(31) Priority date(s):

29 September 2017 (29.09.2017)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

B01F 3/04 (2006.01); **F16K 24/06** (2006.01); **F16K 31/12** (2006.01); **F16K 15/00** (2006.01)

(71) Applicant(s):

AQUATEC MAXCON PTY LTD [AU/AU]; 119 Toongarra Road IPSWICH, Queensland 4305 (AU) *(for all designated states)*

(72) Inventor(s):

JOHNSTON, Gregory; 119 Toongarra Road Ipswich, Queensland 4305 (AU)

YULE, David; 119 Toongarra Road Ipswich, Queensland 4305 (AU)

WILDBUR, Kenneth Roy; 119 Toongarra Road Ipswich, Queensland 4305 (AU)

(74) Agent(s):

IP GATEWAY PATENT & TRADE MARK ATTORNEYS PTY LTD; Suite 9a Springwood Chambers 3360 Pacific Highway Springwood, Queensland 4127 (AU)

(54) Title (EN): DIFFUSER FOR AERATION OF A FLUID

(54) Title (FR): DIFFUSEUR POUR L'AÉRATION D'UN FLUIDE

(57) Abstract:

(EN): An elongate diffuser (10) comprises a diffuser body (30), and a membrane (20) attached so that introduction of gas at a working pressure into the diffuser displaces part of the membrane (20) from contact with the diffuser body (10) providing an elongate sealed compartment (50) between the membrane (20) and a surface (32) of the diffuser body (30). The gas can pass from the compartment (50) through the membrane (20) for aeration of fluid in which the diffuser (10) is immersed. The diffuser body surface (32) which bounds the compartment (50) is recessed away from the membrane (20) in use, to contribute to the lateral cross sectional area of the compartment (50) and facilitate distribution of gas along the diffuser by the compartment (50). An automatic purge valve for purging water from a gas feed pipe of a diffuser is also disclosed.

(FR): Un diffuseur allongé (10) comprend un corps de diffuseur (30) et une membrane (20) fixée de telle sorte que l'introduction de gaz à une pression de service dans le diffuseur éloigne une partie de la membrane (20) du corps de diffuseur (10) fournissant un compartiment étanche allongé (50) entre la membrane (20) et une surface (32) du corps de diffuseur (30). Le gaz peut passer du compartiment (50) à travers la membrane (20) pour l'aération du fluide dans lequel le diffuseur (10) est immergé. La surface de corps de diffuseur (32) qui délimite le compartiment (50) est en retrait par rapport à la membrane (20) lors de l'utilisation, ce qui contribue à la section transversale latérale du compartiment (50) et facilite la distribution de gaz le long du diffuseur par le compartiment (50). L'invention concerne également un robinet de purge automatique pour purger l'eau d'un tuyau d'alimentation en gaz d'un diffuseur.

International search report:

Received at International Bureau: 24 December 2018 (24.12.2018) [AU]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM