

Title (en)
FLUID DISINFECTION APPARATUS AND SYSTEM

Title (de)
FLÜSSIGKEITSDESINFEKTIONSGERÄT UND SYSTEM

Title (fr)
APPAREIL ET SYSTEME DE DESINFECTION DE FLUIDE

Publication
EP 1865997 A2 20071219 (EN)

Application
EP 06727172 A 20060403

Priority
• GB 2006050076 W 20060403
• GB 0507082 A 20050408

Abstract (en)
[origin: GB2424877A] Fluid disinfection apparatus 10 comprising a reservoir 12 for holding fluid 20 to be disinfected, a cylindrical roller member 14 and array of 12 ultra violet lamps 16. The roller member 14 is partly received within the reservoir 12 and thus is partly submerged in the fluid 20. As the roller member 14 rotates (as indicated by the arrows), fluid 20 is picked up on the surface of the roller member 14 from the reservoir 12. The fluid 20 is dispersed into a film of fluid 20 across the surface 34a. Ultra violet (UV) lamps 16 are provided. Exposure of the film to the UV light kills or inactivates any micro-organisms within the fluid 20. Alternatively the apparatus comprises a generally funnel-shaped reservoir (92, Fig. 5), being open at the bottom end. The bottom end of the reservoir is in fluid communication with a first roller member (96, Fig. 5) and as the roller member rotates, fluid (94, Fig. 5) is collected from the reservoir and dispersed as a film on the surface of the first roller member. A series of roller members (96, 98, 100, 102, Fig. 5) are provided. Each roller member rotates in the opposite sense to its adjacent roller, thereby causing the fluid to be transferred onto the following roller member. The film of fluid is irradiated by UV light from an array of lamps (108, Fig. 5). In an alternative embodiment, the apparatus (140, Fig. 6) comprises a reservoir (142, Fig. 6), first and second fluid dispersal means (146, 148, Fig. 6) and two UV light sources (150, 152, Fig. 6). Each fluid dispersal means comprises a rotatably mounted stainless steel disc (154, Fig. 6). The fluid is dispersed into a film across the surface of the rotating disc and illuminated by UV light.

IPC 8 full level
A61L 2/10 (2006.01); **A23L 3/28** (2006.01); **A61L 2/26** (2006.01); **B01J 16/00** (2006.01); **B01J 19/12** (2006.01); **B01J 19/18** (2006.01); **C02F 1/32** (2006.01)

CPC (source: EP GB)
A23L 3/28 (2013.01 - EP); **B01J 16/005** (2013.01 - EP); **B01J 19/123** (2013.01 - EP); **B01J 19/1887** (2013.01 - EP); **C02F 1/32** (2013.01 - GB); **C02F 1/325** (2013.01 - EP); **B01J 2219/1941** (2013.01 - EP); **B01J 2219/1943** (2013.01 - EP); **C02F 2201/3221** (2013.01 - EP); **C02F 2201/3227** (2013.01 - EP); **C02F 2201/3228** (2013.01 - EP)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
GB 0507082 D0 20050511; **GB 2424877 A 20061011**; CA 2604141 A1 20061012; EP 1865997 A2 20071219; WO 2006106363 A2 20061012; WO 2006106363 A3 20070628

DOCDB simple family (application)
GB 0507082 A 20050408; CA 2604141 A 20060403; EP 06727172 A 20060403; GB 2006050076 W 20060403