

Title (en)
Apparatus for providing a clean air zone.

Title (de)
Vorrichtung zur Versorgung einer Reinfluftzone.

Title (fr)
Dispositif pour desservir une zone de salle blanche.

Publication
EP 0372784 B1 19931020 (EN)

Application
EP 89312317 A 19891128

Priority
GB 8828127 A 19881202

Abstract (en)
[origin: EP0372784A2] Apparatus for providing a clean air zone, for example in a hospital operating theatre or microbiological clean room comprises a housing (30) preferably mounted above the zone and having a plenum chamber (P) and a fan and filter means (89, 52) operative to supply air, e.g. from inlets (39), to the plenum chamber, as well as diffuser means (40) in the form of one or more perforated plates (60, 64) arranged below the chamber so that air flows out therethrough. In order to reliably ensure a downward and outward air flow pattern, without the need for temperature controls or differential air velocities, so that influx of airborne contaminants to the sterile zone is precluded, the central diffuser area (60) is planar and successive peripheral diffuser areas (72, 73) are arranged at increasing greater angles relative to the central area so that each increasingly deflects the air outwards, e.g. at 5 DEG , 15 DEG or more, from the central downflow. Advantageously the peripheral diffuser areas (perforate) and intervening imperforate areas serving as deflector vanes are formed integrally as adjacent regions of specially corrugated elongate panels (63).

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CPC (source: EP)
A61G 13/108 (2013.01); **F24F 3/163** (2021.01); **F24F 13/068** (2013.01)

Cited by
US2011294411A1; FR2979006A1; ES2800398A1; AU688121B2; US10058012B2; WO9516168A1; WO2021224518A1; WO9301455A1; US8733060B2; US9326428B2; US9854711B2

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