

Title (en)  
IMPROVED FAN COIL UNIT

Title (de)  
VERBESSERTE LÜFTERSPULENEINHEIT

Title (fr)  
UNITÉ BOBINE DE VENTILATEUR AMÉLIORÉE

Publication  
**EP 4259979 A1 20231018 (EN)**

Application  
**EP 21839667 A 20211209**

Priority  
• IT 202000030377 A 20201210  
• IB 2021061511 W 20211209

Abstract (en)  
[origin: WO2022123484A1] An internal air treatment unit comprises a box-shaped housing with greater front and rear walls which are opposite and spaced apart from each other and which are closed peripherally by peripheral sides, a fan which is supported in the housing with a rotation axis which is substantially perpendicular to at least one of the greater walls, at least one heat exchange battery which is arranged in the housing, at least one inlet opening for the air to be treated and at least one outlet opening for the treated air. The fan and the heat exchange battery are mounted in the housing in order to be sequentially involved by the air flow generated by the fan through the inlet and outlet openings. The fan is of the centrifugal/radial type without any helix diffuser and with reversed vanes, the heat exchange battery is mounted between the front wall and rear wall close to one of the peripheral sides, and is orientated so as to be coplanar relative to the front wall or inclined with respect to the front wall at an angle less than or equal to 90°. The outlet opening is formed at the peripheral side close to the battery or at the front side and the inlet opening is formed in one of the greater walls, preferably the front wall; furthermore, the peripheral sides with the possible exception of the side involved by the outlet opening are closed so that the housing constitutes a diffuser of the fan.

IPC 8 full level  
**F24F 1/0011** (2019.01); **F24F 1/0022** (2019.01); **F24F 1/0057** (2019.01); **F24F 1/0063** (2019.01)

CPC (source: EP)  
**F24F 1/0011** (2013.01); **F24F 1/0022** (2013.01); **F24F 1/0057** (2019.02); **F24F 1/0063** (2019.02); **F24F 1/0067** (2019.02)

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Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
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**IB 2021061511 W 20211209**; EP 21839667 A 20211209; JP 2023535445 A 20211209