

Title (en)  
AXIAL AND CENTRIFUGAL FAN

Publication  
**EP 0183655 A3 19870902 (EN)**

Application  
**EP 85830277 A 19851104**

Priority  
IT 2378484 A 19841128

Abstract (en)  
[origin: EP0183655A2] Electromechanical fan apparatus operable to provide a new type of ventilation comprises a rotor constituted by a rectangular frame (9, 10, 11) mounted to turn about an axis (6) lying in the plane of the frame and parallel to two opposite sides (9) thereof. These sides (9) of the frame, parallel to the axis of rotation (6), are constituted by blades having cylindrical surfaces, with the concavity directed towards the direction of movement, whilst the other two sides of the frame, orthogonal to the axis of rotation (6) are each constituted by two pairs of oppositely inclined blades (10, 10 min ) also having cylindrically curved surfaces and a concavity facing in the direction of movement or in the opposite direction from this. The rotation of rotor (9, 10, 11) consequently causes axial displacement of air from both ends of the rotor, preferably drawing such air streams in and causing an intimate mixing thereof before the mixed air is expelled radially.

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**F04D 25/08**; **F04D 17/16**

IPC 8 full level  
**F04D 17/16** (2006.01); **F04D 25/08** (2006.01)

CPC (source: EP)  
**F04D 17/16** (2013.01); **F04D 25/08** (2013.01)

Citation (search report)  
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• [A] DE 2456521 A1 19760812 - OPEL ADAM AG  
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• [AP] SOVIET INVENTIONS ILLUSTRATED, Derwent Publications, London, Section Mechanical, Week 8532, abstract no. 85-195479/32, P12, 19th September 1985; & SU-A-1 134 798 (KIROV AGRI INST) 15th January 1985

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**EP 0183655 A2 19860604**; **EP 0183655 A3 19870902**; **EP 0183655 B1 19910424**; AT E62977 T1 19910515; DE 3582654 D1 19910529; IT 1196343 B 19881116; IT 8423784 A0 19841128

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