

Title (en)
FAN

Title (de)
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Title (fr)
VENTILATEUR

Publication
EP 1616101 A1 20060118 (DE)

Application
EP 04727247 A 20040414

Priority
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Abstract (en)
[origin: DE102004017727A1] Fan (10) comprises an air-conveying channel (16) containing a fan wheel rotating about a central axis and having a central hub (20) with an outer periphery (27) on which fan blades (26A-26E) are fixed. The fan blades extend with their radial outer edges up to a surface (17) arranged coaxially to the central axis and externally defining the air-conveying channel. The fan blades have sickle-shaped concave front edges and are provided in the region of their radial outer edges with a flow element (winglet) (42A-42E) designed as an obstruction for a compensation flow running about this radial outer edge from the pressure side to the suction side. Independent claims are also included for alternative fans.

IPC 1-7
F04D 29/38; **F04D 29/32**

IPC 8 full level
F04D 29/16 (2006.01); **F04D 29/38** (2006.01)

CPC (source: EP US)
F04D 29/164 (2013.01 - EP US); **F04D 29/384** (2013.01 - EP US); **F05D 2240/307** (2013.01 - EP US)

Citation (third parties)
Third party :
• JP H05141394 A 19930608 - MATSUSHITA SEIKO KK
• JP H05141394 K1
• DE 2405050 A1 19750807 - MTU MUENCHEN GMBH [DE]
• DE 3217085 A1 19831110 - KORFMANN GMBH MASCHF [DE]
• ANONYMOUS: "Wiki: Profil (Strömungslehre)", WAPEDIA, pages 1 - 3, XP003021193, Retrieved from the Internet <URL:http://wapedia.mobi/de/profil>

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DOCDB simple family (publication)
US 2006210397 A1 20060921; **US 7438522 B2 20081021**; AT E502217 T1 20110415; DE 102004017727 A1 20041104;
DE 202004005548 U1 20040617; DE 502004012310 D1 20110428; EP 1616101 A1 20060118; EP 1616101 B1 20110316;
EP 1616101 B2 20160615; WO 2004094835 A1 20041104

DOCDB simple family (application)
US 55349605 A 20051013; AT 04727247 T 20040414; DE 102004017727 A 20040410; DE 202004005548 U 20040410;
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