

Title (en)  
Fan and sensor

Title (de)  
Lüfter mit einem Sensor

Title (fr)  
Ventilateur avec capteur

Publication  
**EP 1531272 A3 20060222 (DE)**

Application  
**EP 04024746 A 20041018**

Priority  
• DE 20318040 U 20031112  
• DE 202004012411 U 20040807

Abstract (en)  
[origin: US2005098641A1] A fan has a sensor ( 86; 186 ) for sensing at least one value of the air that flows through the fan ( 20; 120 ). The fan has a fan housing ( 22, 24; 122, 124 ); an electronically commutated external-rotor motor, arranged in that housing, having an internal stator ( 30; 130 ) and an external rotor ( 46; 146 ); a fan wheel ( 56; 156 ) coupled to the external rotor ( 46; 146 ); an air inlet opening ( 58; 90; 158 ) for the inflow of air that is to be moved by the fan wheel ( 56; 156 ); a circuit board ( 68; 185 ) having a portion ( 66; 188 ) that extends adjacent the air passage opening ( 58; 158 ); and conductors ( 82, 84; 182', 182" ) arranged on that portion ( 66; 188 ), to which conductors the sensor ( 86; 186 ) is connected, preferably by a Surface Mounted Device (SMD) method. Premounting the sensor on the circuit board facilitates automated manufacture and reduces cost.

IPC 8 full level  
**F04D 27/00** (2006.01); **F04D 25/06** (2006.01)

CPC (source: EP US)  
**F04D 25/0633** (2013.01 - EP US); **F04D 25/0646** (2013.01 - EP US); **F04D 25/0666** (2013.01 - EP US); **F04D 27/001** (2013.01 - EP US)

Citation (search report)  
• [XA] US 5436519 A 19950725 - TAKAHASHI SHUJI [JP], et al  
• [A] US 6013966 A 20000111 - FEHRENBACHER WOLFGANG [DE], et al  
• [A] US 6109890 A 20000829 - HORNG ALEX [TW]  
• [A] DE 9100952 U1 19910529

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DE102016006888A1; DE102011111220A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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US 2005098641 A1 20050512; US 7841541 B2 20101130

DOCDB simple family (application)  
**DE 202004016545 U 20041025**; EP 04024746 A 20041018; US 96613404 A 20041014