

Title (en)  
Fan motor suspension

Title (de)  
Aufhängung für einen Ventilatormotor

Title (fr)  
Mécanisme de suspension pour un moteur de ventilateur

Publication  
**EP 1571351 A1 20050907 (EN)**

Application  
**EP 04425136 A 20040302**

Priority  
EP 04425136 A 20040302

Abstract (en)  
A suspension system (100) for a fan (10). The suspension system (100) has at least one damping member (20; 22) interposed between a housing (16) housing an impeller (15) of the fan (10), and at least one housing and supporting member (12, 13) housing and supporting an electric motor (11). And the suspension system (100) is characterized in that the damping member (20; 22) is located at a distance (r) according to the following equation:  $\langle DF \rangle r = \langle \sqrt{J} \rangle \sqrt{M} \langle DF \rangle^0$  where (M) is the "suspended mass" defined by the combined masses of the electric motor (11), the housing and supporting member (12, 13), a drive shaft (14), and the impeller (15); and (J) is the moment of inertia of the "suspended mass" with respect to a longitudinal axis (a) of symmetry of the drive shaft (14). <IMAGE>

IPC 1-7  
**F04D 29/66**

IPC 8 full level  
**F04D 25/08** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP)  
**F04D 29/668** (2013.01)

Citation (search report)  
• [A] DE 20206862 U1 20030904 - EBM WERKE GMBH & CO KG [DE]  
• [A] US 5030068 A 19910709 - JACOBS PAUL G [US], et al  
• [A] US 6278209 B1 20010821 - RUPP BERNHARD [DE], et al

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Designated contracting state (EPC)  
DE IT

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