

Title (en)  
THERMAL OVERLOAD PROTECTION

Title (de)  
THERMISCHER ÜBERLASTSCHUTZ

Title (fr)  
PROTECTION CONTRE UNE SURCHARGE THERMIQUE

Publication  
**EP 1719231 A1 20061108 (EN)**

Application  
**EP 05708146 A 20050201**

Priority  
• FI 2005000066 W 20050201  
• FI 20040154 A 20040202

Abstract (en)  
[origin: WO2005074089A1] A thermal overload protection (1) for an electrical device, particularly an electric motor (M), measures (10) a load current supplied to the electrical device (M), and calculates (16) the thermal load on the electrical device on the basis of the measured load current, and shuts off (S2) a current supply (L1, L2, L3) when the thermal load reaches a given threshold level. The protection comprises a processor system employing X-bit, preferably X=32, fixed-point arithmetic, wherein the thermal load is calculated by a mathematic equation programmed into the microprocessor system structured such that a result or a provisional result never exceeds the X-bit value.

IPC 8 full level  
**H02H 7/085** (2006.01); **H02H 6/00** (2006.01)

CPC (source: EP)  
**H02H 6/005** (2013.01)

Citation (search report)  
See references of WO 2005074089A1

Citation (examination)  
• US 6563685 B2 20030513 - GOTZIG BERNHARD [FR]  
• WO 0124340 A1 20010405 - SIEMENS AG [DE], et al

Cited by  
US10574173B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2005074089 A1 20050811**; CA 2554117 A1 20050811; CA 2554117 C 20120814; CN 100539347 C 20090909; CN 1914778 A 20070214; EP 1719231 A1 20061108; FI 118659 B 20080131; FI 20040154 A0 20040202; FI 20040154 A 20050803

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