

Title (en)  
COMPRESSOR STALL AVOIDANCE

Title (de)  
VERMEIDUNG DES PUMPENS EINES VERDICHTERS

Title (fr)  
EVITEMENT DU CALAGE DE COMPRESSEURS

Publication  
**EP 0777828 B1 20020821 (EN)**

Application  
**EP 96920104 A 19960417**

Priority  

- US 9605309 W 19960417
- US 42733495 A 19950424
- US 1318796 P 19960312

Abstract (en)  
[origin: WO9634207A1] A pressure sensor (12) is located in the compressor stage of a gas turbine engine (10) to provide a pressure signal (PR1) that shows the compressor flow characteristics. The pressure signal (PR1) is applied to a bandpass filter (16) with roll-offs above and below N2. The difference between the filter output and a stored value for the pressure signal is integrated, and compressor bleed valves (18) are opened if the integral exceeds a stored threshold. The health of a compressor stage is determined by analyzing the magnitude of compressor pressure variations at N2 while accelerating the engine and by comparing the magnitude with values obtained from a compressor with a known stall margin.

IPC 1-7  
**F04D 27/02**

IPC 8 full level  
**F04D 27/02** (2006.01)

CPC (source: EP)  
**F04D 27/001** (2013.01); **F04D 27/0223** (2013.01)

Cited by  
CN110608187A; WO2015021522A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**WO 9634207 A1 19961031**; AU 5850796 A 19961118; DE 69623098 D1 20020926; DE 69623098 T2 20021219; EP 0777828 A1 19970611; EP 0777828 B1 20020821

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