

Title (en)

Method to prevent surge of a centrifugal compressor by vent control.

Title (de)

Verfahren zur Vermeidung des Pumpens eines Turboverdichters mittels Abblaseregelung.

Title (fr)

Procédé pour éviter le pompage d'un compresseur centrifuge par le contrôle d'échappement.

Publication

EP 0335105 B1 19941109 (DE)

Application

EP 89103056 A 19890222

Priority

DE 3810717 A 19880330

Abstract (en)

[origin: EP0335105A2] In the case of known control methods the intake volume flow to the compressor and the compressor final pressure measured after the compressor are included in the venting control. Disturbances in the through-flow which have their cause in a process downstream from the compressor are thereby only detected once they have spread through the compressor to the intake side. Under unfavourable conditions intervention by the venting control may therefore already be too late to prevent surging of the compressor. The new method is intended to rectify this drawback. <??>The new method proposes that in addition the delivery flow to the process downstream from the compressor be detected and taken account of in the venting control. This results in prompt reaction of the venting control to changes in the through-flow which are caused by the downstream process. <??>The new method is particularly suitable for the control of turbocompressors on which the downstream process is a possible cause of disturbances with changes in the through-flow. <IMAGE>

IPC 1-7

F04D 27/02

IPC 8 full level

F04D 27/02 (2006.01)

CPC (source: EP US)

F04D 27/0207 (2013.01 - EP US)

Cited by

DE10012380A1; EP0661426A1; EP1134422A3; EP1134422A2; US6551068B2

Designated contracting state (EPC)

AT CH DE GB IT LI NL

DOCDB simple family (publication)

EP 0335105 A2 19891004; EP 0335105 A3 19900822; EP 0335105 B1 19941109; AT E114021 T1 19941115; DE 3810717 A1 19891019; DE 3810717 C2 19920604; DE 58908615 D1 19941215; JP H01300093 A 19891204; US 4948332 A 19900814

DOCDB simple family (application)

EP 89103056 A 19890222; AT 89103056 T 19890222; DE 3810717 A 19880330; DE 58908615 T 19890222; JP 7526989 A 19890329; US 32151989 A 19890309