

Title (en)
Method for operation of turbo compressors

Title (de)
Verfahren zum Betreiben von Turboverdichtern

Title (fr)
Procédé d'opération des turbo-compresseurs

Publication
EP 0967396 B1 20030507 (DE)

Application
EP 99106086 A 19990326

Priority
DE 19828368 A 19980626

Abstract (en)
[origin: EP0967396A2] Multistage turboblowers (2,22,42) have several interacting controls (15,35,55). Each blower stage has its own pumping limit control valves (5,25,45) blowing off into its own intake lines (1,21,41). Flow computers (6,26,46) provide control for calculating intake through-flow (TF). Other computers (7,27,47) determine pumping head discharge levels (PHDL). Variance value comparators (12,32,52) determine differences from theoretical values (PHDL) minus actual values (TF). If an actual value is too small in proportion to a theoretical value, the variance value comparator causes a gradual opening of the corresponding pumping limit control valves, until the actual through-flow corresponds exactly to the theoretical through-flow that depends on any pumping head discharge level. Control is established by means of a maximum selection range connected in series to the pumping limit or interacting controls by signaling lines (16,36,56) to pumping limit control valves.

IPC 1-7
F04D 27/00; **F04D 27/02**

IPC 8 full level
F04D 27/00 (2006.01); **F04D 27/02** (2006.01)

CPC (source: EP US)
F04D 27/02 (2013.01 - EP US); **F04D 27/0269** (2013.01 - EP US)

Cited by
WO2010058002A1; CN110529420A; CN104533820A; US10480521B2; US8939704B2

Designated contracting state (EPC)
CH DE GB IT LI NL

DOCDB simple family (publication)
EP 0967396 A2 19991229; **EP 0967396 A3 20010725**; **EP 0967396 B1 20030507**; DE 19828368 A1 20000113; DE 19828368 C2 20011018; DE 59905412 D1 20030612; US 6164901 A 20001226

DOCDB simple family (application)
EP 99106086 A 19990326; DE 19828368 A 19980626; DE 59905412 T 19990326; US 33644499 A 19990618