

Title (en)
SHAFT

Publication
EP 0408569 B1 19920527 (DE)

Application
EP 89902254 A 19890210

Priority
DE 3805899 A 19880225

Abstract (en)
[origin: WO8908193A1] A shaft (15), whose ends (2, 8) have a diameter less than or equal to that of the central section of the shaft, is used in a turbo-engine (1) comprising impellers (7), a protective sleeve (6) for the shaft, a distance sleeve (5) and the like. A bearing (3) arranged in the drive portion (2) of the shaft supports the parts (5, 6, 7) arranged on the section of the shaft (15) of constant diameter. A clamping device (10) provided at the free end (8) of the shaft urges, by means of intercalated springs (11), the parts (5, 6, 7) located on the shaft against the bearing (3), which may be a movable or fixed bearing.

IPC 1-7
F04D 29/20

IPC 8 full level
F04D 29/20 (2006.01)

CPC (source: EP)
F04D 29/20 (2013.01)

Citation (examination)
DD 126125 A1 19770622

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8908193 A1 19890908; DE 3805899 A1 19890907; DE 58901547 D1 19920702; EP 0408569 A1 19910123; EP 0408569 B1 19920527

DOCDB simple family (application)
EP 8900123 W 19890210; DE 3805899 A 19880225; DE 58901547 T 19890210; EP 89902254 A 19890210