

Title (en)

Turbocharger shaft-hub connection

Title (de)

Wellen-/Nabenverbindung eines Turboladers

Title (fr)

Liaison arbre-moyeu d'un turbocompresseur

Publication

EP 1489263 B1 20070214 (DE)

Application

EP 03405441 A 20030619

Priority

EP 03405441 A 20030619

Abstract (en)

[origin: EP1489263A1] The shaft (1) is connected to an impeller (2), with one having a bore (20) with internal thread, the other having a journal (10) with outer thread, and both having an axial stop (11,21). Both threads have flat torque-transmitting sides facing the axis (A) of shaft and impeller. Relative turning of shaft and impeller are brought into friction connection by radial pressure, via the axial stops. Journal and bore are at least partly of conical shape, and the tapered thread is a multiple esp. triple thread. Sides and axis of shaft and impeller enclose an angle smaller than 45[deg], esp. between 5[deg] and 15[deg]. The connection is for a turbocharger.

IPC 8 full level

F01D 5/02 (2006.01)

CPC (source: EP US)

F01D 5/025 (2013.01 - EP US); **F05D 2220/40** (2013.01 - EP US); **F05D 2250/232** (2013.01 - EP US); **F05D 2250/281** (2013.01 - EP US)

Cited by

CN103846613A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1489263 A1 20041222; **EP 1489263 B1 20070214**; DE 50306502 D1 20070329; US 2004258467 A1 20041223; US 6918723 B2 20050719

DOCDB simple family (application)

EP 03405441 A 20030619; DE 50306502 T 20030619; US 86136004 A 20040607