

Title (en)  
BEARING SYSTEM.

Title (de)  
LAGERSYSTEM.

Title (fr)  
SYSTEME DE PALIER.

Publication  
**EP 0138984 A4 19850701 (EN)**

Application  
**EP 84901651 A 19840405**

Priority  
US 48359983 A 19830411

Abstract (en)  
[origin: WO8404141A1] A bearing system for a high-speed, rotating shaft (20) includes an outer race (12) adapted to be rotatable in its machine support and (32) to carry a rolling bearing (16), such as a ball bearing, at one end and further includes a floating sleeve bearing (14) at the other end. The outer race of the system can be adapted to rotate on a film of lubricant at a speed less than one-third, and preferably about one-tenth, that of the rotating shaft. The bearing system can include thrust-bearing surfaces (12c, 12d) at one end of the outer race and surfaces to permit lubrication of the sleeve and rolling bearings. The floating sleeve bearing is free to rotate at speeds of about one-half the speed of the rotating shaft. The system thus can provide very low bearing losses and a long bearing life. Such a system can be particularly adapted to provide an insertable bearing support for the rotating shaft of a turbocharger and to position the sleeve bearing adjacent the turbine (34) and the rolling bearing adjacent the compressor (36).

IPC 1-7  
**F16C 21/00**

IPC 8 full level  
**F02B 39/00** (2006.01); **F16C 21/00** (2006.01)

CPC (source: EP)  
**F16C 21/00** (2013.01); **F16C 2360/24** (2013.01)

Citation (search report)  
• [A] DE 1526439 A1 19700212 - KUEHNLE KOPP KAUSCH AG  
• [A] FR 1198181 A 19591204  
• [A] US 4329000 A 19820511 - KESKE FRANK E

Cited by  
KR101504861B1; KR101117021B1

Designated contracting state (EPC)  
FR

DOCDB simple family (publication)  
**WO 8404141 A1 19841025**; BR 8406592 A 19850312; DE 3490178 T1 19850502; EP 0138984 A1 19850502; EP 0138984 A4 19850701; GB 2148412 A 19850530; GB 2148412 B 19870218; GB 8427974 D0 19841212; JP S60501019 A 19850704; SE 8406270 D0 19841210; SE 8406270 L 19841210

DOCDB simple family (application)  
**US 8400439 W 19840405**; BR 8406592 A 19840405; DE 3490178 T 19840405; EP 84901651 A 19840405; GB 8427974 A 19840405; JP 50163384 A 19840405; SE 8406270 A 19841210