

Title (en)
TURBOCHARGER WITH OIL-FREE HYDROSTATIC BEARING

Title (de)
TURBOLADER MIT ÖLFREIEM HYDROSTATISCHEM LAGER

Title (fr)
TURBOCOMPRESSEUR À PALIER HYDROSTATIQUE SANS HUILE

Publication
EP 3491250 A1 20190605 (EN)

Application
EP 16750560 A 20160726

Priority
US 2016044056 W 20160726

Abstract (en)
[origin: WO2018022015A1] A turbocharger for an internal combustion engine, the turbocharger being supported by hydrostatic bearings (15, 16) in both a radial and an axial direction by a compressed air supplied from a compressor (11) of the turbocharger and boosted in pressure by a separate boost compressor (17) to a high enough pressure to support the rotor of the turbocharger. The turbocharger hydrostatic bearings (15, 16) are damped using wire mesh or dispersed friction dampers (33, 41).

IPC 8 full level
F04D 29/057 (2006.01); **F01D 25/22** (2006.01); **F16C 32/06** (2006.01)

CPC (source: EP KR)
F01D 25/22 (2013.01 - EP KR); **F04D 29/0513** (2013.01 - EP KR); **F04D 29/0516** (2013.01 - EP KR); **F04D 29/057** (2013.01 - EP KR); **F04D 29/668** (2013.01 - EP KR); **F16C 27/00** (2013.01 - EP); **F16C 32/0622** (2013.01 - KR); **F05D 2220/40** (2013.01 - EP KR); **F05D 2240/53** (2013.01 - EP KR); **F16C 32/0622** (2013.01 - EP); **F16C 2360/24** (2013.01 - EP KR)

Citation (search report)
See references of WO 2018022015A1

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Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2018022015 A1 20180201; CN 109790848 A 20190521; EP 3491250 A1 20190605; JP 2019527316 A 20190926; KR 20190028541 A 20190318

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