

Title (en)

Sealing device for pod propeller propulsion systems

Title (de)

Abdichtung für einen Gehäusepropeller

Title (fr)

Joint d'étanchéité pour un propulseur à boîtier extérieur

Publication

EP 1213221 B1 20040218 (EN)

Application

EP 01126239 A 20011105

Priority

JP 2000374745 A 20001208

Abstract (en)

[origin: EP1213221A1] A sealing device for pod propeller propulsion systems according to the present invention comprises: a pod (4) provided on a structure (3) floating on the water so as to rotate freely about a vertical axis; a cylindrical casing (5) connected to the rear-side of the pod (4); a propeller shaft (7) inserted coaxially into the casing (5) and connected to an electric motor (6) disposed in the pod (4); a plurality of seal rings (12, 13, 14, 15) in sliding contact with the outer periphery of the shaft (7) for sealing outside water (W); first air supplying means (26) for supplying compressed air into an air chamber (20) defined between a pair of adjacent seal rings (13, 14) out of the plurality of seal rings (12, 13, 14, 15); and second air supplying means (27) for supplying compressed air having air pressure higher than air pressure (P1) in the air chamber (20) and varying corresponding to variations in draft pressure (P) into the pod (4). <IMAGE>

IPC 1-7

B63H 23/32; **B63H 25/42**; **B63H 5/125**

IPC 8 full level

B63H 20/10 (2006.01); **B63H 23/32** (2006.01)

CPC (source: EP)

B63H 23/321 (2013.01); **B63H 5/125** (2013.01); **B63H 2005/075** (2013.01); **B63H 2005/1254** (2013.01); **B63H 2005/1258** (2013.01); **B63H 2023/327** (2013.01)

Cited by

FR2955557A1; CN110203363A; US7189126B2; EP3656655A1; EP1586798A1; NL1025959C2; CN107074334A; RU2670552C1; EP4043335A1; CN114940255A; WO2010100094A3; WO2005090797A1; WO2020104070A1; EP4197898A1; US11702182B2; WO2016071565A1; KR20170069278A

Designated contracting state (EPC)

DE FI GB NL SE

DOCDB simple family (publication)

EP 1213221 A1 20020612; **EP 1213221 B1 20040218**; DE 60102064 D1 20040325; DE 60102064 T2 20041230

DOCDB simple family (application)

EP 01126239 A 20011105; DE 60102064 T 20011105