

Title (en)

FLOATING SEAL FOR HIGH ROTATIONAL SPEED PROPELLER SHAFTS WITH INTEGRATED FORCED OIL CIRCULATION GENERATOR AND SAFETY DEVICES

Title (de)

MIT ZWANGSÖLKREISLAUF UND SICHERHEITSVORRICHTUNG VERSEHENE BEWEGLICHE ABDICHTUNG FÜR SCHNELLLAUFENDE PROPELLERANTRIEBSWELLEN

Title (fr)

JOINT ETANCHE FLOTTANT POUR AXES D'HELICE A HAUTE VITESSE DE ROTATION AVEC GENERATEUR DE CIRCULATION FORCEE D'HUILE INCORPORE ET DISPOSITIFS DE SECURITE

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Application

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Abstract (en)

[origin: US5795198A] PCT No. PCT/MC95/00001 Sec. 371 Date Feb. 3, 1997 Sec. 102(e) Date Feb. 3, 1997 PCT Filed Aug. 9, 1995 PCT Pub. No. WO96/05100 PCT Pub. Date Feb. 22, 1996Briefly stated, the present invention comprises a seal joint for a propeller shaft passing through a boat hull. The seal includes a bronze support bushing that is fitted over the propeller shaft, first elastic rings cooperating with the support bushing, an elastic bellows surrounding the shaft downstream of the support bushing, and a lubricating oil circulation system. The lubricating oil circulation system comprises two stages that cooperate to establish water tightness, a first ring-shaped water retention chamber filled with a viscous insoluble sealing medium, and a second chamber filled with lubricating oil. Forced, closed-circuit, circulation of the lubricating oil is produced during rotation of the propeller shaft within the support bushing, inside a static eccentric chamber formed within the support bushing, the support bushing being loosely fit onto the propeller shaft with no rigid fixing so that the propelled shaft is rotatable and axially moveable.

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