

Title (en)

CONSTANT-SPEED VARIABLE-PITCH VOITH-SCHNEIDER OMNI-DIRECTIONAL PROPELLER

Title (de)

OMNIDIREKTIONALER VOITH-SCHNEIDER-VERSTELLPROPELLER MIT KONSTANTER DREHZAHL

Title (fr)

PROPULSEUR VOITH-SCHNEIDER OMNIDIRECTIONNEL À PAS VARIABLE ET À VITESSE CONSTANTE

Publication

EP 3168136 A4 20180314 (DE)

Application

EP 15818921 A 20150706

Priority

- CN 201410326630 A 20140710
- CN 201420380437 U 20140710
- CN 2015083361 W 20150706

Abstract (en)

[origin: WO2016004836A1] The present invention discloses a constant-speed variable-pitch Voith-Schneider omni-directional propeller, comprising a main machine, a machine base, a main shaft, a rotating disk, a steering engine, a steering shaft, a central gear, an intermediate gear, a blade gear, blades, and blade shafts. The main machine drives a sun gear to rotate; the sun gear is engaged with a planet gear; the planet gear is engaged with a ring gear; the ring gear is engaged with a speed-adjusting gear, the speed-adjusting gear rotating under the control of an auxiliary power; the planet gear rotates in cooperation with a fixing shaft on the planet carrier; the planet carrier is linked with the rotation disk via the main shaft, and the main shaft rotates in cooperation with the machine base; the steering shaft penetrates in order the sun gear, the main shaft, and the rotation disk, one end of the steering shaft being linked with the steering engine, and the other end of the steering shaft penetrating the rotation disk and then linking with the central gear of the rotation disk; the rotation disk also rotates in cooperation with multiple blade shafts, the blade shafts being parallel to the main shaft; the multiple blade shafts are evenly distributed along the circumference of a circle having the central gear as the center; the blade shafts penetrate and are fixedly connected with the blade gear; the blade gear is engaged with the central gear via the intermediate gear; one end of a blade shaft is connected with a blade.

IPC 8 full level

B63H 23/12 (2006.01); **B63H 1/10** (2006.01); **B63H 23/02** (2006.01)

CPC (source: EP)

B63H 1/10 (2013.01); **B63H 23/02** (2013.01); **B63H 23/12** (2013.01); **B63H 2023/0283** (2013.01)

Citation (search report)

- [A] CN 102001434 A 20110406 - HANGZHOU FENGGUANG TECHNOLOGY CO LTD
- [A] DE 19938415 C1 20010118 - VOITH HYDRO GMBH & CO KG [DE]
- See references of WO 2016004836A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3168136 A1 20170517; **EP 3168136 A4 20180314**; **EP 3168136 B1 20190619**; WO 2016004836 A1 20160114

DOCDB simple family (application)

EP 15818921 A 20150706; CN 2015083361 W 20150706