

Title (en)

APPARATUS FOR CONTROLLING A HYDRAULIC MACHINE

Title (de)

VORRICHTUNG ZUM REGELN EINER HYDRAULISCHEN MASCHINE

Title (fr)

DISPOSITIF DE RÉGULATION D'UNE MACHINE HYDRAULIQUE

Publication

EP 3601805 A1 20200205 (DE)

Application

EP 18705117 A 20180208

Priority

- DE 102017106693 A 20170329
- EP 2018053139 W 20180208

Abstract (en)

[origin: CA3058354A1] Apparatus for controlling a hydraulic machine, e.g. a turbine, a pump or a pump-turbine, using constant-displacement pumps that are driven at variable rotational speeds, said apparatus comprising a device for performing an emergency closure, the device being characterized by low energy consumption and high efficiency while ensuring that all operation-relevant and safety-relevant requirements of a hydraulic machine are met.

IPC 8 full level

F15B 11/08 (2006.01); **F15B 11/17** (2006.01)

CPC (source: EP US)

F15B 1/022 (2013.01 - US); **F15B 11/003** (2013.01 - US); **F15B 11/17** (2013.01 - EP US); **F15B 20/00** (2013.01 - US); **F15B 2211/20515** (2013.01 - EP US); **F15B 2211/20538** (2013.01 - EP); **F15B 2211/20546** (2013.01 - US); **F15B 2211/20561** (2013.01 - EP US); **F15B 2211/20576** (2013.01 - EP US); **F15B 2211/212** (2013.01 - EP US); **F15B 2211/27** (2013.01 - EP US); **F15B 2211/30505** (2013.01 - EP); **F15B 2211/30515** (2013.01 - EP US); **F15B 2211/3057** (2013.01 - EP US); **F15B 2211/3138** (2013.01 - EP); **F15B 2211/31535** (2013.01 - EP); **F15B 2211/31576** (2013.01 - EP); **F15B 2211/322** (2013.01 - US); **F15B 2211/327** (2013.01 - EP); **F15B 2211/40507** (2013.01 - EP US); **F15B 2211/41572** (2013.01 - EP US); **F15B 2211/41581** (2013.01 - EP); **F15B 2211/625** (2013.01 - EP US); **F15B 2211/6355** (2013.01 - EP US); **F15B 2211/7053** (2013.01 - EP); **F15B 2211/7054** (2013.01 - EP); **F15B 2211/8752** (2013.01 - EP US); **F15B 2211/8755** (2013.01 - EP US)

Citation (search report)

See references of WO 2018177640A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102017106693 B3 20180530; CA 3058354 A1 20181004; CN 110446859 A 20191112; CN 110446859 B 20200828; EP 3601805 A1 20200205; EP 3601805 B1 20210106; US 10808734 B2 20201020; US 2020018329 A1 20200116; WO 2018177640 A1 20181004

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DE 102017106693 A 20170329; CA 3058354 A 20180208; CN 201880019767 A 20180208; EP 18705117 A 20180208; EP 2018053139 W 20180208; US 201816497182 A 20180208