

Title (en)

Device for lowering the fuel consumption of the propulsion of a watercraft

Title (de)

Vorrichtung zur Verringerung des Antriebsleistungsbedarfs eines Wasserfahrzeuges

Title (fr)

Dispositif de réduction de la consommation de combustible de la propulsion d'une embarcation

Publication

**EP 2591994 B1 20140618 (DE)**

Application

**EP 12184827 A 20120918**

Priority

DE 102011055304 A 20111111

Abstract (en)

[origin: EP2591994A1] The device (100) has outer fins (20a-20d) projecting in outward direction from a fore-nozzle (10). Ends (201) of the outer fins are fastened to the nozzle, and other ends (202) of the outer fins are designed as free end (202). End of inner fins (21a-21c) are fastened to an inner wall surface (12) of the nozzle. The outer fins or inner fins are arranged radially to a propeller axis of a propeller of a watercraft and designed as a sweptback fin. The outer fins are arranged in an extension of the inner fins. A fin end piece (23) protrudes on a suction side (203) of the outer fins.

IPC 8 full level

**F01D 5/02** (2006.01); **B63H 5/16** (2006.01)

CPC (source: EP KR US)

**B63B 1/08** (2013.01 - KR); **B63H 1/28** (2013.01 - EP US); **B63H 5/16** (2013.01 - EP KR US); **F01D 5/02** (2013.01 - US)

Cited by

CN113646230A; WO2021239963A1

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**EP 2591994 A1 20130515; EP 2591994 B1 20140618**; CA 2794875 A1 20130511; CA 2794875 C 20150428; CN 103101610 A 20130515; CN 103101610 B 20160413; DK 2591994 T3 20140915; ES 2502475 T3 20141003; HK 1181358 A1 20131108; HR P20140833 T1 20141010; HR P20140833 T8 20141219; JP 2013103717 A 20130530; JP 5357319 B2 20131204; KR 101521772 B1 20150520; KR 20130052505 A 20130522; PL 2591994 T3 20150331; PT 2591994 E 20140918; SG 190525 A1 20130628; TW 201332838 A 20130816; TW I505966 B 20151101; US 2013121837 A1 20130516; US 8814496 B2 20140826

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**EP 12184827 A 20120918**; CA 2794875 A 20121109; CN 201210452132 A 20121112; DK 12184827 T 20120918; ES 12184827 T 20120918; HK 13108707 A 20130724; HR P20140833 T 20140903; JP 2012246958 A 20121109; KR 20120110542 A 20121005; PL 12184827 T 20120918; PT 12184827 T 20120918; SG 2012082327 A 20121107; TW 101141551 A 20121108; US 201213672825 A 20121109