

Title (en)

MULTI-FUNCTIONAL FLAP USED AS A BACK-FLOW FLAP

Title (de)

MULTIFUNKTIONALES FLAP ALS RUECKSTROMKLAPPE

Title (fr)

VOLET MULTIFONCTIONNEL EN TANT QUE CLAPET DE RECIRCULATION

Publication

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Application

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Abstract (en)

[origin: WO2016116102A1] The invention relates to a device of a safety system and/or resource and energy-efficiency improvement system for influencing the flow around an aero- or hydrodynamic body (3), preferably an aerofoil (3), according to the principle of a back-flow flap (4), characterised in that: said device, together with the aero- or hydrodynamic body (3), in particular aerofoil (3), form at least a partial shift of the delimitation (21) of the flap region by means of the back-flow flap (4) and the delimiting component (5) thereof when the back-flow flap (4) is partially and/or completely raised, thus influencing the trailing edge separation vortex/vortices (1) and/or the flap separation vortex/vortices (2); and in that the delimitation (21) of the flap region shifts completely up to or beyond the profile trailing edge (6), or shifts only to a section in front of the profile trailing edge (6). The delimitation component is movably connected to the aerofoil (3) by means of a basic element (23) and is preferably permanently secured and/or releasably secured for maintenance purposes, thus ensuring a long service life for the rotor blade and/or wind turbine and/or flap system, preferably > 5 years, particularly preferably > 10 years, and most particularly preferably >= 20 years, and/or thus optionally allowing simple removal/replacement.

IPC 8 full level

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