

Title (en)
IMPROVEMENTS IN AND RELATING TO WINGSAIL CRAFT AND WINGSAILS THEREFOR

Publication
EP 0073589 B1 19860326 (EN)

Application
EP 82304256 A 19820812

Priority
• GB 8125707 A 19810822
• GB 8125710 A 19810822
• GB 8125711 A 19810822

Abstract (en)
[origin: EP0073589A1] A wingsail assembly is described in which the pivoting mounting is situated in line with a strengthened portion of the sail assembly such as a strengthened leading edge of a sail element whilst still retaining the alignment of the axis of pivoting and the centre of pressure. A sail assembly is also described in which locating means, typically in the form of wire stays, a mechanical linkage or a hydraulic system, is arranged to act on opposite sides of a balancing mass, carried by a boom attached to the wingsail assembly and arranged to locate the mass in an approximately horizontal plane. Computer control of the locating means may be incorporated. Where the wing or wing section is constructed from spars and ribs where the latter define the aerofoil section of the wing and lie in the direction of air flow, the ribs are conveniently formed from moulded GRP material and include flanges which in selected regions of the periphery of the rib subtend an angle greater than 90 DEG to the plane of the rib to facilitate removal of the rib from a mould and include other regions in which the flange subtends an angle of 90 DEG to the plane of the rib to facilitate its fixing to a spar. The non 90 DEG angles are conveniently commensurate with the angle of rake of the edge regions of the sail or sail element and are situated at points adjacent the leading or trailing edges of the sail or sail element.

IPC 1-7
B63H 9/06

IPC 8 full level
B63H 9/04 (2006.01); **B63H 9/06** (2006.01)

CPC (source: EP KR)
B63H 9/06 (2013.01 - KR); **B63H 9/061** (2020.02 - EP)

Cited by
CN115243971A; US6732670B2; WO0189923A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0073589 A1 19830309; EP 0073589 B1 19860326; AU 560143 B2 19870402; AU 8714982 A 19830303; CA 1185487 A 19850416; DE 3270117 D1 19860430; DE 8223561 U1 19840322; DE 8237177 U1 19840412; ES 275247 U 19840801; ES 275247 Y 19851201; FI 77420 B 19881130; FI 77420 C 19890310; FI 822833 A0 19820816; FI 822833 L 19830223; JP H02162191 A 19900621; JP H0631069 B2 19940427; KR 840001087 A 19840328; PT 75448 A 19820901; PT 75448 B 19840820

DOCDB simple family (application)
EP 82304256 A 19820812; AU 8714982 A 19820813; CA 409818 A 19820820; DE 3270117 T 19820812; DE 8223561 U 19820820; DE 8237177 U 19820820; ES 275247 U 19820820; FI 822833 A 19820816; JP 21119989 A 19890816; KR 820003790 A 19820821; PT 7544882 A 19820820