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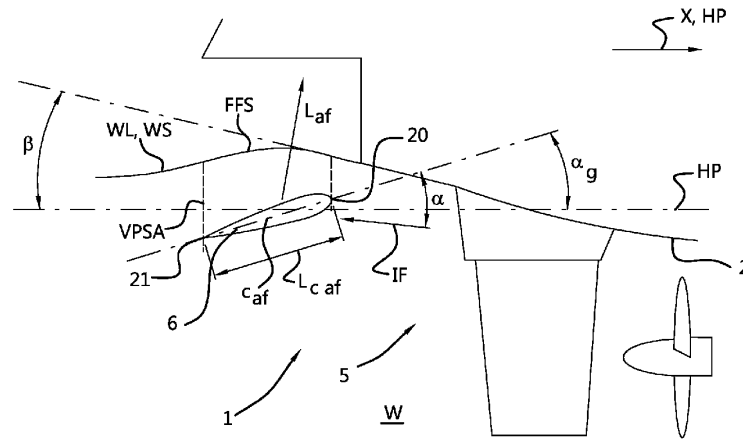
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(54) Title: VESSEL FOR OPERATING ON A BODY OF WATER, COMPRISING AN AFT FOIL CONFIGURED FOR LOWERING
A TOTAL RESISTANCE OF THE VESSEL

Fig. 2



(57) Abstract: The invention relates to a vessel (1) comprising: - a hull (2), having a forward direction (X) in a horizontal plane (HP) with an aft portion (5), having a buttock angle (β); and - an aft foil (6), suitable for generating a lift force (L_{af}), wherein a span of the aft foil (6) is at most 0.95 times a beam overall (BOA) of the vessel, the aft foil comprising a symmetric or asymmetric hydrofoil section, a lift coefficient ($C_{L,af}$) and a zero lift angle (α_0), as well as a chord (c_{af}) having a chord length ($L_{c,af}$), wherein the chord of the aft foil (6) is configured to have a geometric angle (α_g) with respect to the horizontal plane (HP) equal to $180 / (2\pi^2) * 1 * C_{L,af} + \alpha_0 - k * \beta$, wherein k is between 0 and 1.25, and l is between 0 and 1.25.

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