

US Patent No. 9764797

Title of invention: PERSONAL WATERCRAFT

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— Reducing the resistance a jet ski receives while planing with stabilizers —

Jet skis and other small planing boats that plane on the water are required to have low resistance on their body to quickly reach a planing state. A boat body consists of a hull, which comes in contact with the water, and a deck, which has passenger space.

As shown in **Fig. 1**, the joint between the hull and deck has a hook shape that faces downward to secure the joint length to achieve adequate joint strength and to position the hull and deck. This joint is seen all around the boat body.

When a small planing boat is planing forward, water flowing along the boat body collides with the erect part extending vertically from the joint at the stern, and the bow is tilted downward as shown in **Fig. 2 (a)** by the force

generated by the water stream collision, increasing the resistance the boat receives while planing and decreasing stability when the boat is going over waves.

The PERSONAL WATERCRAFT of this patent has stabilizers on the right and left rear parts of the joint as shown in **Fig. 3** to allow water to flow along the inclined surface at the bottom of each stabilizer as shown in **Fig. 2 (b)**, thereby preventing water streams from colliding with the erect part at the joint of the stern.

This prevents the bow from tilting downward and reduces the resistance on the boat body during planing, thereby enabling small planing boats to plane faster and more stably.

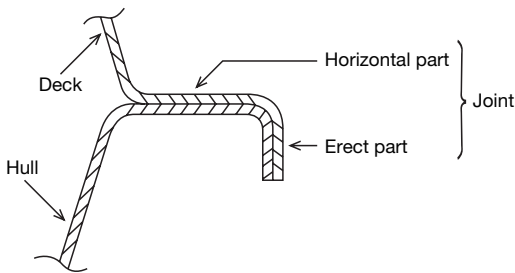


Fig. 1 Joint



Fig. 3 Stabilizer

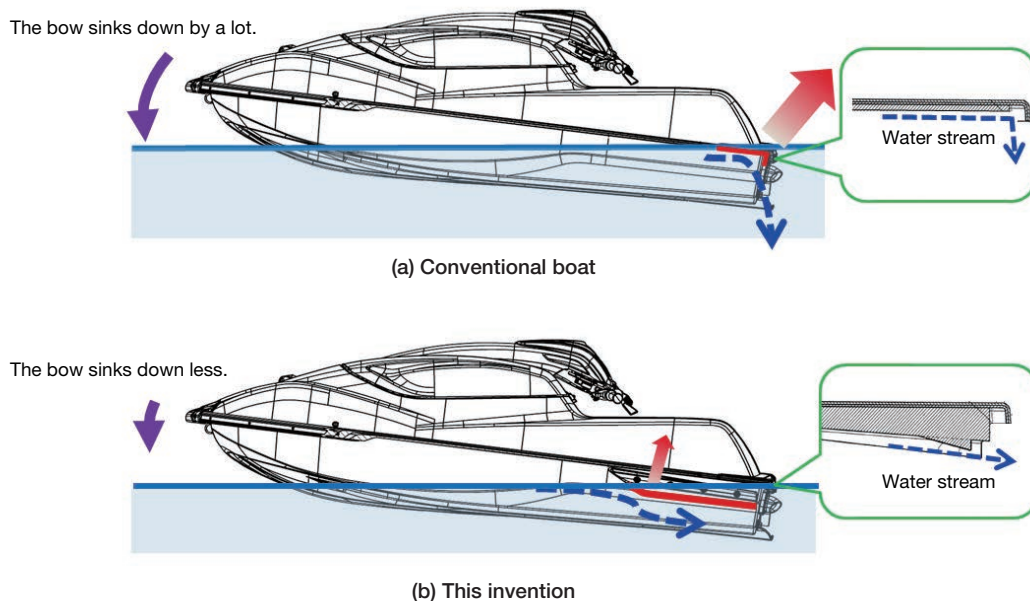


Fig. 2 Structures of this invention and conventional boats