

WATERCRAFT WITH HULL VENTILATION

Abstract

An engine-powered watercraft includes three parallel hulls, namely a center hull with two or more transverse steps, and two smaller outer hulls or amas on either side of the center hull that are configured to form two vent ducts on either side of the center hull, disposed between the center hull sides and the amas. The amas, steps and vent ducts are disposed along the length of the watercraft and are configured to enable high speed capability and to facilitate pressurization of the vent ducts. The pressurized vent duct maximizes ventilation of the running bottom of the watercraft so as to improve efficiency and to reduce drag thereon. The pressurized vent duct creates an area of lift at the widest, aft-most points of the running bottom, which thereby results in improving the transverse and longitudinal stability of the watercraft and in reducing the trim for better seakeeping.

Figure 1