

BLOOD PUMP WITH IMPROVED LEAKAGE CONTROL

ABSTRACT

A blood pump with a stator and rotor wherein the rotor is assembled by bonding the stator components with epoxy. The bonding surfaces of the rotor components are primed with a silane-based primer to improve adhesion between the primer and the rotor components by rendering such surfaces hydrophobic. A bonding surface of one of the stator yoke or the stator sleeve, or both, is treated with a primer that improves wettability of the bonding surface and improves bonding of the epoxy to the binding surface. The device has a bonding surface adhered to epoxy in which a primer was applied on such bonding surface prior to introducing epoxy onto the bonding surface. In addition to improved bond strength, hydrophobic surface would control moisture ingress.

[Fig. 10]