ABSTRACT

This invention concerns an intravascular blood pump (1) for percutaneous insertion into a patient's blood vessel. The blood pump (1) comprises a pump casing (2) having a blood flow inlet (21) and a blood flow outlet (22), an impeller (3) arranged in said pump casing (2) so as to be rotatable about an axis of rotation (10). The impeller (3) has blades (31) sized and shaped for conveying blood from the blood flow inlet (21) to the blood flow outlet (22). The blood pump (1) comprises a drive unit (4) for rotating the impeller (3), the drive unit (4) comprising a magnetic core (400) including a plurality of posts (40) arranged about the axis of rotation (10) and a back plate (50) connecting the posts (40) and extending between the posts (40) in an intermediate area (59). A coil winding (44) is disposed around each of the posts (40). The coil windings (44) are controllable so as to create a rotating magnetic field, wherein the impeller (3) comprises a magnetic structure (32) arranged to interact with the rotating magnetic field so as to cause rotation of the impeller (3). A material of at least a portion of at least one of the posts (40) is integral with a material of the intermediate area (59) of the back plate (50). Further, the invention concerns a method of manufacturing a magnetic core (400) and a method of manufacturing an intravascular blood pump (1).

[FIG 1]