

ABSTRACT OF THE DISCLOSURE

LIQUID FUEL REFORMING APPARATUS

A liquid fuel reforming apparatus comprising a bobbin main body 12 containing a fuel passage 16 through which a liquid fuel such as gasoline and a combustible gas passes; a coil 14 having a predetermined number of winding formed around the bobbin main body 12; and a multi-faced magnetic metal material 18 sealed in the fuel passage 16, which permits passage of the liquid fuel being brought into contact therewith; wherein the liquid fuel is adapted to be reformed by applying a predetermined voltage across the coil 14 to induce a magnetic field and effect magnetization of the multi-faced magnetic metal material 18 contained in the fuel passage 16 and by allowing the liquid fuel to flow through the fuel passage 16 in contact with the magnetized multi-faced magnetic metal material 18. The multi-faced magnetic metal material 18 may be replaced with a multi-faced material of an amorphous metal alloy.

(Fig 1)