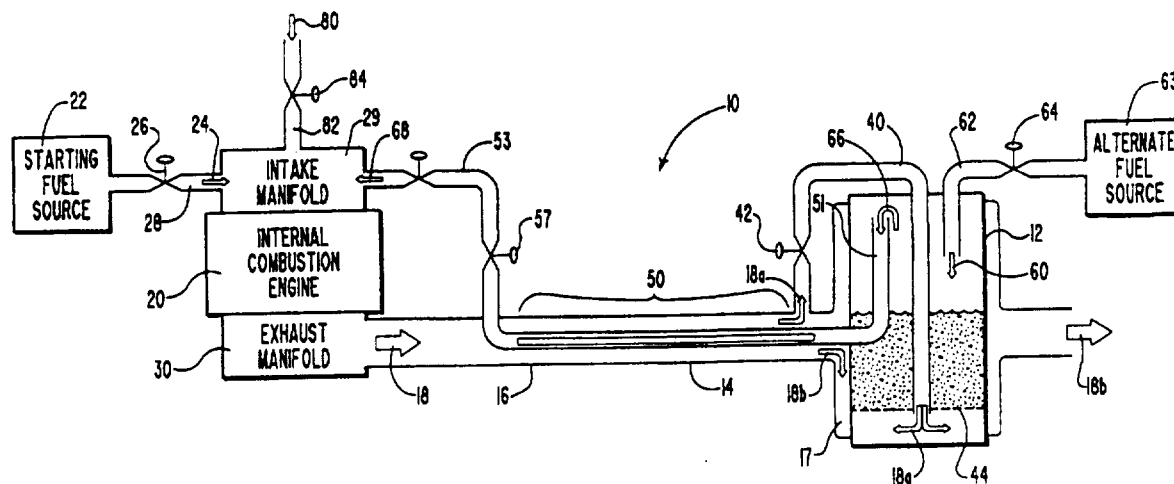




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(54) Title: FUEL PRETREATER APPARATUS AND METHOD



(57) Abstract

A novel fuel pretreater apparatus and method for pretreating alternate fuel (63) to render it usable as the fuel source for an internal combustion engine (20). The apparatus includes a volatiliziation chamber (12) into which the alternate fuel is received. An exhaust plenum (17) encloses the volatiliziation chamber so that thermal energy supplied by exhaust from the internal combustion engine can be used to volatilize the alternate fuel. A bypass stream of exhaust is diverted through the alternate fuel in the volatiliziation chamber and is used to carry the volatilized fuel through a reactor prior to its being introduced into the internal combustion engine. The reactor is interposed in the exhaust conduit and is prepared from a reactor tube having a reactor rod mounted coaxially therein in spaced relationship. The exhaust passing through the exhaust conduit provides thermal energy to the reactor to pretreat the alternate fuel.