

Method of hybrid fuel mixture formation in cylinder of four-stroke internal combustion engine with spark ignition comprises supplying fuel-air mixture into combustion chamber and igniting it using electrical discharge. Gasoline is supplied via distributed injection system, and hydrogen is supplied by direct injection into engine cylinders through separate fuel rail with injectors that ensure hydrogen injection at a pressure of 2.5–3.0 MPa during the compression stroke, wherein amount of hydrogen is regulated in real time by electronic engine control unit.