

A method for electromagnetic treatment of liquid hydrocarbons, which involves warming up thereof to gas-vapor state, electromagnetic irradiation and cooling to the liquid state, at that electromagnetic irradiation of hydrocarbons is conducted at frequencies characteristic for loosening molecules just up to the breaking their molecular links and corresponding to frequencies of maximal absorption of electromagnetic energy by hydrocarbons. This provides an irreversible modification of molecular structure and isomerization of initial hydrocarbons by the breaking their molecular links, and can be used for obtaining high-octane motor-car petrol.