

The invention relates to industrial processing technology, in particular to refining hydrocarbon liquids, to a method and device for the resonance excitation thereof and also to a method and device for the fractionating thereof. The inventive method for fluid resonance excitation comprises: a mechanical oscillation energy supply to the fluid with the aid of an energy source placed in the fluid and functioning on a frequency complying with a general law $F_n = F_1 N^{-1/2}$, where $N > 1$ - is a selected integer number, and $F_1 = 63,992420$ [kHz] - is a basic oscillation frequency when $N = 1$. The device for resonance fluid excitation comprises a rotor with a working wheel embodied in the form of a disc and a circular wall provided with a row of output holes, and a stator having an input orifice connected to the cavity of the working wheel, and a coaxial wall. The inventive method for fractionating hydrocarbon liquids comprises preliminary treatment of the liquid with the aid of the above preswitched on device for resonance excitation, the supply of the preliminary treated liquid to a rectifying column and evacuation of distilled and residuum fractions. The inventive device for fractionating hydrocarbon liquids incorporates a feed pump, at least one rectifying column and said preswitched on device for resonance excitation.

