

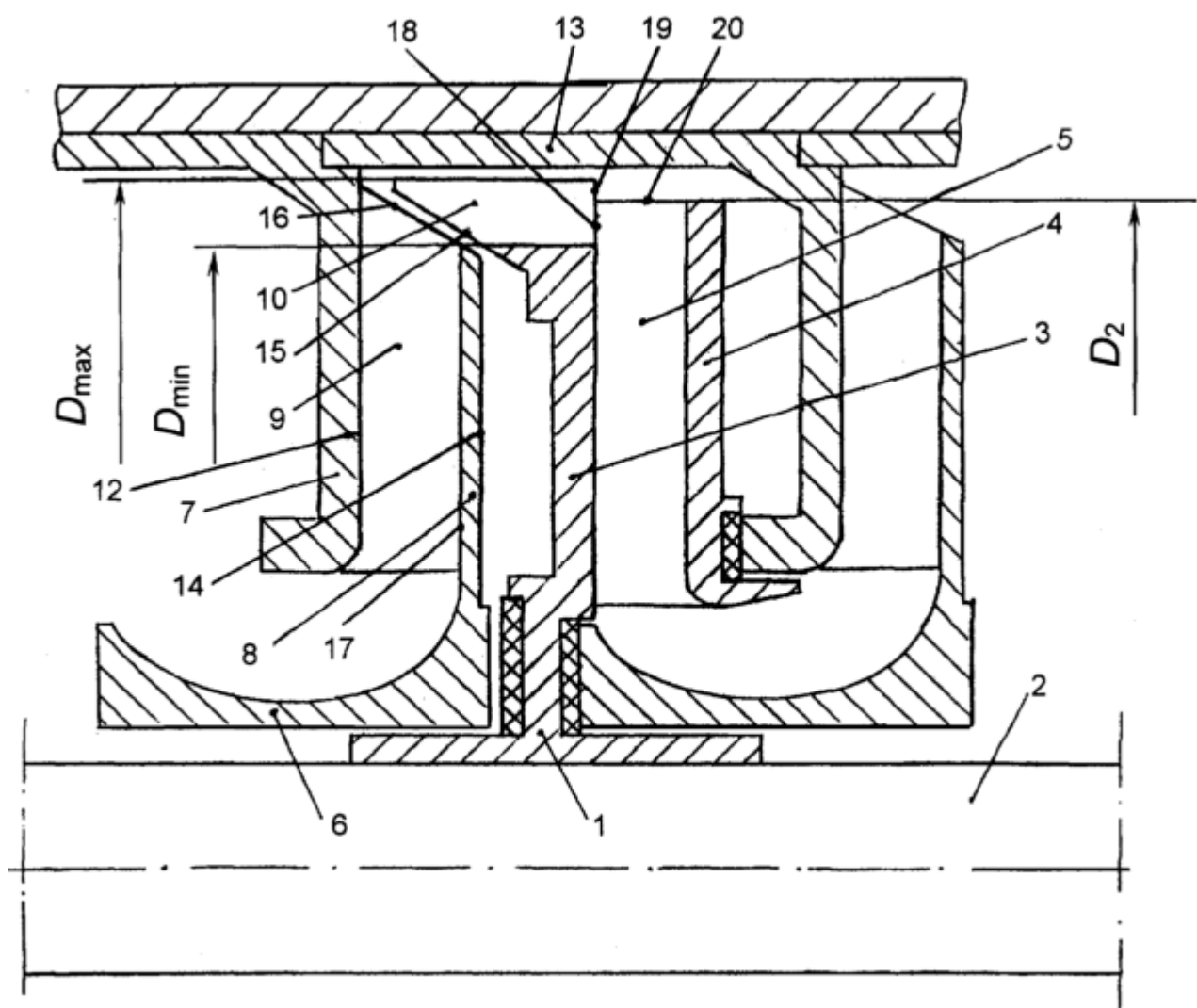
№2253756

FIELD: oil producing industry; multistage pumps.

SUBSTANCE: proposed stage consists of closed centrifugal impeller installed on shaft and provided with driving and driven disks with blades placed between and guide-vanes assembly made in form of backward vanes installed between housing and cover to form fixed channels. Additional axis vanes in form of rotating axial vane rim are arranged in space between flow outlet of impeller, inner surface of housing of guide-vane assembly and inlet to backward vanes of guide-vane assembly. Additional vanes are arranged to provide breaking of gas bubbles at transferring of gas-liquid mixtures owing to interaction of trailing edges of additional vanes and leading edges of vanes of guide-vane assembly located close to each other. Such design of stage makes it possible to increase head, preclude "floating up" of impeller within wide delivery range.

EFFECT: considerable increase of efficiency, improved operation of stage on gas-liquid mixture.

6 cl, 4 dwg



Фиг. 1