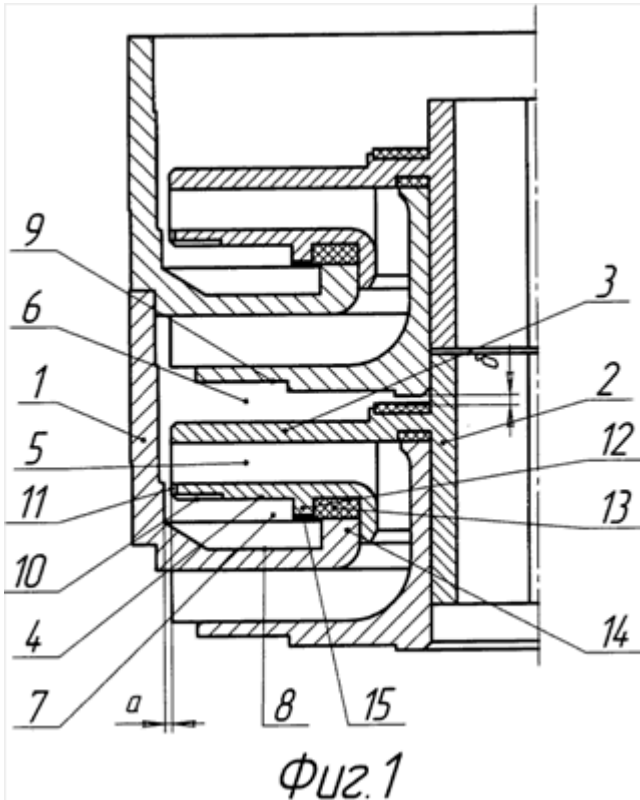


№2322616Т

FIELD: oil producing industry.



SUBSTANCE: invention relates to multistage submersible centrifugal pumps assembly and closed impeller with main and cover disks and blades arranged in between. Knurling is made on one of disks of impeller which has curvilinear form near that of form of impeller blades. To increase axial forces, knurling is made on cover disk, and to decrease said force, on main disk. Knurling pointed to side opposite to rotation is made additionally on outer cylindrical surface of cover disk of impeller at angle of 30-60° to plane of disk. To preclude getting of abrasive particles into ring clearance between cylindrical surface of cover disk and inner cylindrical surface of guide vane assembly, additional knurling can be made on ring bead of cover disk coinciding with direction of knurling on peripheral part of disk. Proposed stage can be manufactured using standard tools and equipment.

EFFECT: increased efficiency owing to adjustment of value of axial force and shift of moment of floating up of impeller.

3 cl, 4 dwg