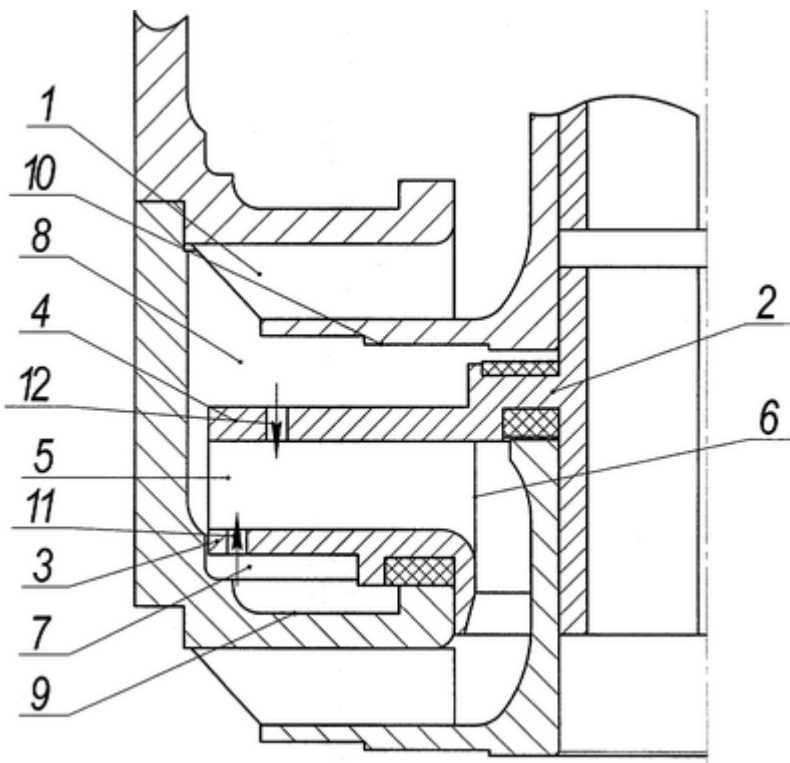


№2303168. Реферат

FIELD: pump engineering, in particular, pumps for extracting oil from wells.



Фиг. 1

SUBSTANCE: a step of multi-step centrifugal down-pump contains guiding apparatus and closed working wheel. Working wheel has disks and an internal hollow with blades between them, lower and upper pockets, formed respectively by upper surfaces of following and leading disks and end surfaces of guiding apparatus before and after the working wheel. Pockets are connected hydraulically to internal hollow of working wheel through the body of a disk. Connection of pocket to internal hollow of working wheel is

made by means of continuous circular slit in the body of a disk or separate sector circular slits between blades. To increase the axial force influencing the working wheel, lower pocket is connected to internal hollow of aforementioned wheel, and to decrease the force, upper pocket is connected to internal hollow of aforementioned wheel. Circular slit may be made with bevels on external side of disks of working wheel or may be made narrowing towards the inside of working wheel. Disks may be made on external side in front of circular slit with cone thinning.

EFFECT: solved problem of changing the value of axial force in either direction practically without complication of wheel design and its manufacturing technology, increased efficiency and discharge head.

4 cl, 4 dwg