

**(54) RADIAL GUIDE VANE OF MULTI-STAGE SUBMERSIBLE PUMP**

(57) Abstract:

FIELD: engines and pumps.

SUBSTANCE: invention is related to the field of pump engineering and first of all to pumps for oil extraction from wells and for water supply in payout oil-bearing bed for maintenance of reservoir pressure in it. Guide vane 2 consists of cylindrical body 4, upper disk 5, lower disk 6, inserts 7 and cover 8, arranged as separate parts. On internal surface of body 4 there are protrusions 9 with spiral surface, axis of which is parallel to axis of guide vane 2, and flat end. Inserts 7 are installed tightly to flat ends of every protrusion 9 and are fixed in slot seats arranged on peripheral part of upper disk 5 upstream inlet to return channels. Transition channels formed with the help of profiled inclined grooves in external cylindrical surface of insert 7, return channels are connected to spiral outlets on upper disk 5. Bores 12 and 13 are arranged at sides of protrusions 9. Disk 6 is arranged as a whole with bush 17.

EFFECT: reduction of hydraulic losses and provision of efficient pumping of liquid with high gas content.

7 cl, 6 dwg

