

№2376500

(54) IMPELLER OF SUBMERGED CENTRIFUGAL PUMP STAGE

(57) Abstract:

FIELD: engines and pumps.

SUBSTANCE: invention relates to **submerged** oil well centrifugal pumps. Pump **impeller** 1 consists of drive plate 2 made integral with hub 3, driven plate 4 and vanes arranged there between. Flow passages are formed between convex side 7 and concave side 8 of adjacent vanes and inner surface of plates 2 and 4. To reduce probability of flow passage clogging in **impeller** 1 and axial force acting on the latter, through slots are made in plates 2 and 4 between all vanes that are exposed on the side of larger diameter of aforesaid plates. Said slots are formed by convex and concave smoothly merging boundaries. Slot length makes at least half the flow passage length. Note here that one of two said boundaries in each slot 9 is aligned with the side of adjacent vane, the other one being equidistant from said vane.

EFFECT: reduced mounting height at invariable pump head, reduced rotor weight, ease of manufacture and higher efficiency.

6 cl, 2 dwg

