

Title (en)

IMPELLER AND CENTRIFUGAL PUMP HAVING SAME

Title (de)

SCHAUFELRAD UND KREISELPUMPE DAMIT

Title (fr)

ROUE À AUBES ET POMPE CENTRIFUGE ÉQUIPÉE D'UNE TELLE ROUE À AUBES

Publication

**EP 3475577 A1 20190501 (DE)**

Application

**EP 17732920 A 20170627**

Priority

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Abstract (en)

[origin: WO2018002034A1] The invention relates to an impeller (3) for transporting a liquid (F) through a centrifugal pump (1) by rotation about a rotation axis (R) in the centrifugal pump (1), which can be operated with reduced stagnation regions, and relates to a centrifugal pump (1) having such an impeller (3). The impeller (3) comprises at least one first circular disk (3a) with a central opening (34) and a first surface (31) extending from the central opening (34) to a radially outer rim (33), wherein on the first surface (31) there are arranged multiple main vanes (41) which each extend from the central opening (34) as a starting point (41a) to the rim (33) as an endpoint (41e), having a pressure side (41d) and a suction side (41s), and, between two adjacent main vanes (41), in each case one intermediate vane (42) extending from a starting point (42a) in the direction of the disk rim (33) to an endpoint (42b), wherein the respective starting point (42a) of the intermediate vanes (42) is at a distance (DZ) from the center of the impeller (3) that is greater than the diameter of the central opening (34) and the intermediate vanes (42) are in each case arranged closer to the pressure side (41d) of the main vane (41) following the intermediate vane (42) during rotation of the impeller (3) than to the suction side (41s) of the main vane (41) preceding this intermediate vane (42).

IPC 8 full level

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