

Title (en)  
APPARATUS FOR IMPELLER SEALING IN CENTRIFUGAL PUMPS

Title (de)  
VORRICHTUNG ZUR LAUFRADABDICHTUNG BEI KREISELPUMPEN

Title (fr)  
DISPOSITIF POUR L'ÉTANCHÉITÉ DU ROTOR DE POMPES CENTRIFUGES

Publication  
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Application  
**EP 09745466 A 20090515**

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Abstract (en)  
[origin: WO2009138082A1] The invention relates to an apparatus for impeller sealing in centrifugal pumps for fluid media, by means of which apparatus the gap between the pump housing (1) and at least one impeller (2) is sealed completely against a material transport from the pressure side (3) of the impeller (2) to its suction side (4). According to the invention, a sealing ring which comprises a rigid thrust ring (7) and an annular elastic sealing lip (8) which is connected to the thrust ring (7) is arranged in the pump housing (1) between the pressure side (3) and the suction side (4), wherein, during operation of the centrifugal pump, the sealing lip (8) bears in a sliding manner in the region of the impeller inlet (5) over the entire circumference of the impeller (2) against a sliding surface (6') which is formed on the impeller (2). To this end, the sealing ring is positioned by means of an actuator (9) in the pump housing (1) and its sealing lip (8) which is inclined against said sliding surface (6') is prestressed.

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