

Title (en)  
SELF-PRIMING PUMP ASSEMBLY

Title (de)  
SELBSTANSAUGENDE PUMPENAGGREGATION

Title (fr)  
ENSEMBLE DE POMPES À AMORÇAGE AUTOMATIQUE

Publication  
**EP 3303845 A1 20180411 (DE)**

Application  
**EP 16726880 A 20160603**

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Abstract (en)  
[origin: WO2016198334A1] The invention relates to a self-priming pump assembly which is a series connection of a liquid ring pump which operates as a rotating positive-displacement pump and a non-self-priming centrifugal pump, according to the preamble of claim 1. The invention develops the self-priming pump assembly of the generic type in such a way that the flow conditions for the flow of fluids to and in the return line are improved. This is achieved by virtue of the fact • that the first connector opening (9a) has, in the meridian plane of the centrifugal pump (2), a bulge (33) which sectorally encloses a longitudinal axis (a3) of the first connector opening (9a), • that the bulge (33) is oriented on one side and towards a rotational axis (a-i) of the pump assembly (1), • that the bulge (33) continuously widens the first connector opening (9a) towards the impeller plane directly or indirectly, • and that the bulge (33) merges, at its end section which faces the impeller plane, by way of a transition surface (34) continuously into the lateral boundary surface (2.2b) or into an inner circumferential wall (30) of the ring duct (3\*; 3\*\*) which adjoins the latter.

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