

Title (en)  
PUMPING ARRANGEMENT

Title (de)  
PUMPENANORDNUNG

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DISPOSITIF DE POMPAGE

Publication  
**EP 4006347 A1 20220601 (EN)**

Application  
**EP 22167424 A 20220408**

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Abstract (en)  
A pumping arrangement is proposed, comprising a first multistage pump (10a) and a second multistage pump (10b), wherein each multistage pump (10a, 10b) comprises: a housing (2) with a pump unit (3) arranged in the housing (2), wherein the housing (2) comprises a pump inlet (21) for receiving a fluid with a suction pressure, and a pump outlet (22) for discharging the fluid with a discharge pressure, and wherein the pump unit (3) comprises a plurality of impellers (31, 32, 33) for conveying a fluid from the pump inlet (21) to the pump outlet (22), and a pump shaft (5) for rotating about an axial direction (A), with the pump shaft (5) extending from a drive end (51) to a non-drive end (52), wherein each impeller (31, 32, 33) is mounted to the pump shaft (5) in a torque proof manner. The second multistage pump (10b) comprises at least a first mechanical seal (50) for sealing the pump unit (3) at the pump shaft (5), with the first mechanical seal (50) having a process side (59) facing the pump unit (3). The pump outlet (22) of the first multistage pump (10a) is connected to the pump inlet (21) of the second multistage pump (10b), so that the first multistage pump (10a) and the second multistage pump (10b) are arranged in series. The process side (59) of the first mechanical seal of the second multiphase pump (10b) is in fluid communication with the pump inlet (21) of the first multistage pump (10a).

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Citation (applicant)  
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• EP 3808984 A1 20210421 - SULZER MANAGEMENT AG [CH]  
• WO 2017137080 A1 20170817 - FMC SEPARATION SYSTEMS BV [NL]  
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Citation (search report)  
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