

Title (en)  
A CENTRIFUGAL PUMP WITH BALANCING MEANS AND A METHOD OF BALANCING AXIAL FORCES OF THE CENTRIFUGAL PUMP

Title (de)  
KREISELPUMPE MIT AUSGLEICHSMITTEL UND VERFAHREN ZUM AXIALKRAFTAUSGLEICH DER KREISELPUMPE

Title (fr)  
POMPE CENTRIFUGE AVEC DES MOYENS D'ÉQUILIBRAGE ET PROCÉDÉ D'ÉQUILIBRAGE DES FORCES AXIALES DE LA POMPE CENTRIFUGE

Publication  
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Application  
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Abstract (en)  
[origin: WO2017157702A1] The present invention relates to single- or multi-stage centrifugal pumps having novel disc- type means for balancing the axial forces of the pump. The disc-type balancing means are provided with at least one annular groove (54) in at least one of the non-axial counter surfaces (50) and (52) of the balancing disc (22) and the counter member (28).

IPC 8 full level  
**F04D 29/041** (2006.01); **F04D 1/06** (2006.01); **F04D 29/047** (2006.01); **F04D 29/22** (2006.01)

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Citation (search report)  
See references of WO 2017157702A1

Cited by  
CN114508393A; CN113396287A; WO2020165046A1

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**WO 2017157702 A1 20170921**; BR 112018068267 A2 20190115; CN 108779782 A 20181109; EP 3430270 A1 20190123; EP 3430270 B1 20191113; RU 2018132444 A 20200417; RU 2018132444 A3 20200519; US 2019063450 A1 20190228

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