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Publication  
**EP 3617447 B1 20230614 (DE)**

Application  
**EP 19202347 A 20160412**

Priority  
• DE 102015105933 A 20150417  
• EP 16164888 A 20160412

Abstract (en)  
[origin: CN106050647A] The pump includes a housing housing that forms a canister-shaped accommodation chamber with an end wall and a circumferential wall; the pump insert is arranged in the accommodating chamber and is arranged in the accommodating chamber. The pump insert comprises a rotor, a first housing portion and a second housing portion, a first housing portion and a second housing portion, the rotor surrounds the rotary shaft between them and is rotatably disposed relative to the first and second housing portions; a lifting ring surrounds the rotor and is disposed between the first housing portion and the second housing portion. Wherein a rotation axis direction or a rotation axis direction is arranged between the containing outer shell and the second outer shell part. elastic springs are arranged in the rotating shaft direction, wherein the elastic springs are arranged in the rotating shaft direction, the spring has a spring structure made of metal, in particular steel, made of steel, in particular steel, the spring structure imparts a main spring characteristic to the spring in the direction of the rotating shaft or in the direction of the rotating shaft, and wherein the spring is substantially supported in a region toward the second housing portion., the area is axially aligned with the lifting ring in the direction of the rotating shaft and in the axial direction of the lifting ring, and thus the second housing part is pressed against the lifting ring.

IPC 8 full level  
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