

Title (en)  
RECIPROCATION PUMP

Title (de)  
HUBKOLBENPUMPE

Title (fr)  
POMPE À PISTON ALTERNATIF

Publication  
**EP 4130471 B1 20240410 (EN)**

Application  
**EP 22188558 A 20220803**

Priority  
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Abstract (en)  
[origin: EP4130471A1] Reciprocating pump (1), comprising a casing (2) having guide seats (3) extended along a corresponding radial direction (X), heads (4) mounted on the casing (2) at respective guide seats (3) and each defining a pumping chamber (5), and membranes (6) each delimiting a pumping chamber (5). In addition, the reciprocating pump (1) comprises actuation means (7) housed inside the casing (2) and comprising pistons (8), each of which carrying a membrane (6) fixed thereto and susceptible of sliding in a guide seat (3) between a release position and a compression position, in which the membrane (6) respectively expands and reduces the volume of the pumping chamber (5), and a thrust cam (10) in abutment against the pistons (8) and rotating in order to move them from the release position to the compression position. In addition, the actuation means (7) comprise one or more rocker arms (11), each of which provided with a first lever arm (13) acting on a corresponding piston (8) and an opposite second lever arm (14), and a return cam (15), which is fixed on the drive shaft (9) and is actuatable to rotate around the rotation axis (Y) in order to move each rocker arm (11) around a corresponding pin (12). Each rocker arm (11) is also movable between an operative position, in which the return cam (15) acts against the second lever arm (14) in order to return, by means of the first lever arm (13), the piston (8) to slide from the compression position towards the release position, and a non-operative position, in which the return cam (15) releases the second lever arm (14) in order to free the piston (8) to slide from the release position towards the compression position.

IPC 8 full level  
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