

Title (en)
SUCTION JET PUMP

Title (de)
SAUGSTRAHLPUMPE

Title (fr)
POMPE À JET

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Application
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Abstract (en)
[origin: WO2009095132A1] Suction jet pumps are already known with a driving line (1) which leads via a jet outlet into a suction chamber (3), wherein the suction chamber has a suction opening (5) which interacts with a valve element (6) and through which fluid can be sucked into the suction chamber. The valve element together with the suction opening forms a suction valve. The suction jet pump is driven by a driving stream flowing via the driving line. The suction jet pump is arranged in a storage tank (11) and sucks fuel out of a fuel tank into the storage tank. At low levels in the fuel tank, air may sometimes be sucked up and conducted into the storage tank, as a result of which foaming occurs in the storage tank. However, the large volume of the foam causes fuel to be displaced, which may result in partial emptying of the storage tank. This effect is also referred to as dynamic leakage. A characteristic curve of the suction jet pump that represents the suction power as a function of the driving stream has a comparatively steep gradient. Severe foaming occurs only above a critical suction power of the suction jet pump, referred to below as the foam limit. In the case of the suction jet pump according to the invention, foaming is avoided or at least reduced. According to the invention, it is provided that the driving line has a bypass opening (10) which leads into the suction chamber and is arranged in such a manner that the bypass stream thereof acts on the valve element.

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