

Title (en)
INSTALLATION FOR PUMPING CRYOGENIC FLUID AND FILLING STATION COMPRISING SUCH AN INSTALLATION

Title (de)
ANLAGE ZUM PUMPEN EINES KRYOGENEN FLUIDS UND TANKSTELLE MIT EINER SOLCHEN ANLAGE

Title (fr)
INSTALLATION DE POMPAGE DE FLUIDE CRYOGÉNIQUE ET STATION DE REMPLISSAGE COMPRENANT UNE TELLE INSTALLATION

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Application
EP 22729584 A 20220518

Priority
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• EP 2022063391 W 20220518

Abstract (en)
[origin: CA3220404A1] Disclosed is a cryogenic fluid pumping installation (1) that comprises a leak-tight enclosure (13) intended to contain a bath of cryogenic fluid, the enclosure (13) housing a compression chamber (3) communicating with the bath and a movable piston (5) for compressing the fluid in the compression chamber (3), the piston (5) being mounted at a first end of a rod (50), the installation (1) further comprising a drive mechanism (21) for driving a second end of the rod (50) reciprocally in a longitudinal direction (A), the drive mechanism (21) comprising a motor (121) provided with a rotary shaft (211) and a mechanical conversion system (212) for converting the rotary motion of the shaft (211) into a linear motion. In an operating configuration of the installation (1), the longitudinal direction (A) of movement of the rod (50) of the piston is vertical and the motor (21) is rigidly affixed to an upper frame (6), the rotary shaft (211) is coupled to the mechanical conversion system (212) via a linkage system, such as a rigid link or a gimbal, a first, upper end of the enclosure (13) is connected to the mechanical conversion system (212), and a second, lower end of the enclosure (13) engages a supporting member providing retention and bearing loads transmitted by the motor (121) via the shaft.

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