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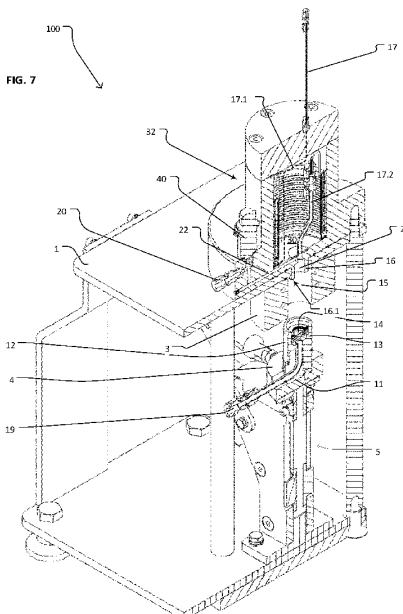
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- (54) **Title:** SMALL SCALE LIPOSOME EXTRUDER



(57) **Abstract:** Apparatus for extruding liposomes, comprising the following components: means for applying a hydraulic pressure P on a liquid medium; a frame comprising a vertical lifting unit; feed line in fluid connection with a tempering chamber located in a housing, wherein the housing comprises a protrusion extending parallel to a central axis (A), wherein said housing is mounted on said frame; a pressure chamber comprising an outer cartridge, the protrusion of the housing, a feed orifice, an outlet orifice, an inner collar for mounting at least a filter element, wherein - the cartridge is linked to an outlet line and mounted on a socket movable in direction of the central axis (A) and being releasably coupled for an overlapping range with the protrusion, wherein said socket is vertically guided by said vertical lifting unit, wherein said pressure chamber is designed for bearing said hydraulic pressure P; at least one porous filter element defining an outlet of said pressure chamber, wherein said filter element comprises open pores having a defined diameter D; a lifting mechanism designed for elevating and lowering the socket; wherein said filter element is contained in a (filter) cartridge which is removably mounted to the socket; and wherein said lifting mechanism comprises at least one rack and pinion gear, wherein the pinion is pivot-mounted in said frame and the rack is vertically guided by said guide way.

WO 2024/175457 A1