

Title (en)

HOUSING CONSTRUCTION FOR ACCOMMODATING A TOOTHED RING MICROPUMP

Title (de)

GEHÄUSEAUFBAU ZUR AUFNAHME EINER MIKROZAHNRINGPUMPE

Title (fr)

STRUCTURE CORPS POUR MICROPOMPTE A COURONNE DENTEE

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Application

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Abstract (en)

[origin: DE19843161A1] The invention relates to a housing construction for accommodating and bearing a microsystem, e.g. a micropump (MP) for conveying a fluid. The aim of the invention is to improve the housing construction in such a way that it is no longer necessary to produce a special housing construction for each different application. To this end, several elements of a layered structure (20; 30; 31; 32; 40; 11; 12) are provided, including at least two which extend vertically in relation to a housing axis (100). One of said layered structure elements is configured as a support plate (30) with an axially oriented recess (30a) for receiving a first and second functional element (A) of the fluidic microsystem. One of the layered structure elements is configured as a connecting block (11) for mounting an inlet and an outlet (60) for carrying fluid (F) to and from the microsystem. An additional plate-shaped layered structure element (31; 20) is located between the connecting block (11) and the support plate (30) and bears an axially oriented channel segment (20a; 31k, 31k'), a peripherally oriented channel segment (41k, 41k') or a radially oriented channel segment (20r), or a combination of at least two of these channel segment types (20a, 20r) for guiding the fluid (F) through from the connections of the connecting block (11) to the microsystem in the recess (30a) in the support plate (30) and back.

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