

Title (en)
PUMPING AND SWITCHING DEVICE AND AN APPARATUS FOR SELECTING AND SORTING FLUIDS

Title (de)
PUMP- UND SCHALTVORRICHTUNG UND VORRICHTUNG ZUM AUSWÄHLEN UND SORTIEREN VON FLUIDEN

Title (fr)
DISPOSITIF DE POMPAGE ET DE COMMUTATION ET APPAREIL DE SÉLECTION ET DE TRI DE FLUIDES

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Application
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Abstract (en)
[origin: WO2022074442A1] Pumping and switching device (1) defining a containment volume (V) and comprising: a plurality of inlet openings (4) and a plurality of outlet openings (5) selectively placeable in fluid communication with the inlet openings (4); a selector device (6), arranged at least partially within the containment volume (V), rotatable in a single first predetermined rotation direction within the containment volume (V) and configured to put in fluid communication at least one inlet opening (4) and at least one outlet opening (5); and a pump (7) mounted on the selector device (6) inside the containment volume (V) and integral with the selector device (6) during the rotation in the first rotation direction. Such pump (7), comprising a rotor (12) rotatable with respect to the selector device (6) only in a second rotation direction opposite the first rotation direction, is configured to move a fluid through the inlet opening (4) and the outlet opening (5), put in fluid communication by the selector device (6). The device further comprises sensor means (100) associated with the selector device (6) and/or the pump (7), said sensor means (100) being adapted to measure: an absolute angular position of the selector device (6) within the containment volume (V); and/or an absolute angular position of the pump (7) within the containment volume (V); and/or a relative angular position between the selector device (6) and the pump (7).

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