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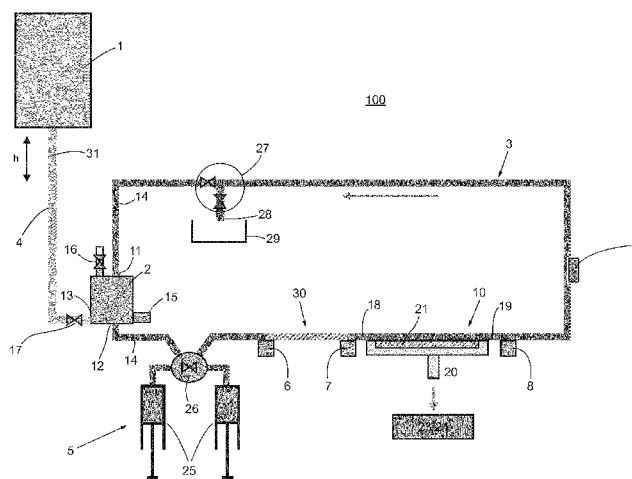
(54) **Title:** MICRO FLOW FILTRATION SYSTEM AND FLOW FILTRATION METHOD

Fig. 4

(57) **Abstract:** A micro flow filtration system comprises a fluid circuitry (3) and a first reservoir (1) outside the circuitry (3) suitable for containing a fluid. The fluid circuitry (3) comprises a tangential flow filtration module (10) capable of separating the fluid sample into a retentate stream and a permeate stream upon passage of the fluid sample into the tangential flow filtration module (10) through an inlet feed (18). The fluid circuitry (3) further comprises a second reservoir (2) integrated in the fluid circuitry (3), a pump (5) for creating and driving a fluid flow, optionally at least one pressure sensor (6, 7 or 8) for acquiring and detecting data about the fluid sample, optionally a pressure regulator (9) for regulating the flow in the fluid circuitry (3) and a plurality of conduits (22) forming the fluid circuitry (3) together with the second reservoir (2), the TFF-module (10), the pump (5), the pressure sensor (6, 7 or 8) (if present) and the pressure regulator (9) (if present). The volume of the first reservoir (1) outside the circuitry (3) is significantly larger than the volume of the second reservoir (2). The first reservoir (1) outside the fluid circuitry (3) is connected to the circuitry (3) via a connection conduit (31) such that the fluid flows unidirectionally into the circuitry (3) until the first reservoir (1) is empty so that a continuous fluid flow from the first reservoir (1) to the circuitry (3) is established.