Abstract:

The invention relates to a device, which is preferably microfabricated, comprising a positioning device for the sequential positioning of particles, wherein the positioning device has a preferably rigid delimiting structure, wherein the delimiting structure forms a first receptacle (3) for positioning a particle and a second receptacle (4) for positioning a particle, wherein the first receptacle (3) and the second receptacle (4) are arranged in a row, wherein the positioning device comprises a device opening (5) through which fluid can flow into the positioning device, wherein the positioning device comprises a device channel extending from the device opening (5) into the positioning device, wherein the device channel comprises the first receptacle (5) and the second receptacle (5), wherein the device (1) comprises at least one bypass channel (6, 7), wherein the device (1) comprises a branching point (8), wherein the device channel and the bypass channel (6, 7) are branched via the branching point (8) in such a way that a flow particle located in the branching point (8) can flow into the bypass channel (6, 7) or via the device opening (5) into the device channel.

The device channel has a greater hydrodynamic resistance than the bypass channel (6, 7). Alternatively, the device channel has the same hydrodynamic resistance as the bypass channel (6, 7).