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(54) **Title:** DEVICE, SYSTEM AND METHOD FOR ISOLATING A BIOLOGICAL MATERIAL

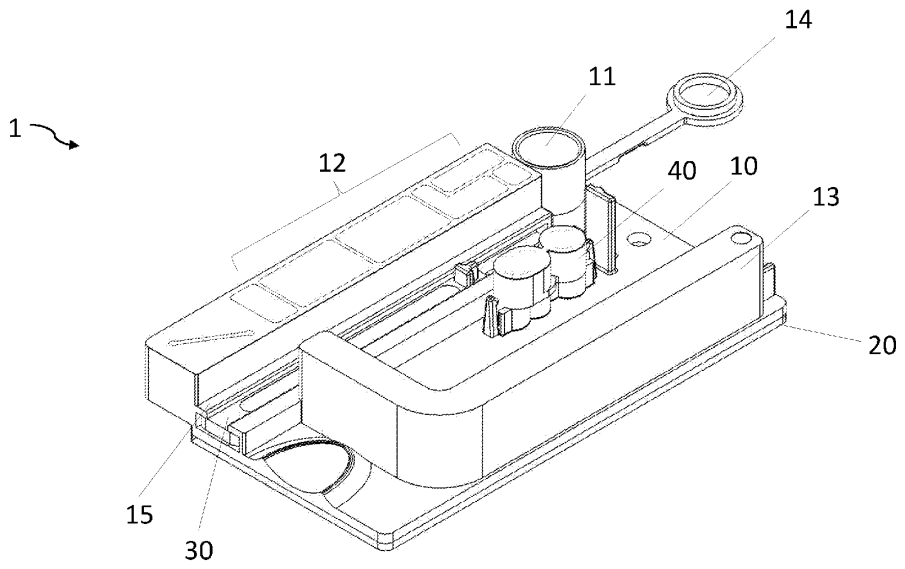

Figure 1A

(57) **Abstract:** The invention relates to a device for isolating a biological material such as nucleic acids, which includes a housing comprising a plurality of compartments and a plurality of fluid channels, a slider and a dry reagent capsule. Each compartment is configured to be fluidically connected to a respective fluid channel with respective end terminating at a track disposed on the housing. The slider is movable along the track and includes a plurality of connecting channels extending therethrough, wherein a selected one of the connecting channels is configured to connect ends of selected ones of the fluid channels based on a position of the slider along the track. The dry reagent capsule is configured to be mounted to the housing and to be fluidically connected to a respective fluid channel in-situ. In the preferred embodiment, the dry reagent comprises lyophilized beads containing a cross-linker of dimethyl adipimidate (DMA) and the fluid channels comprise a binding channel coated with an amino group.

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