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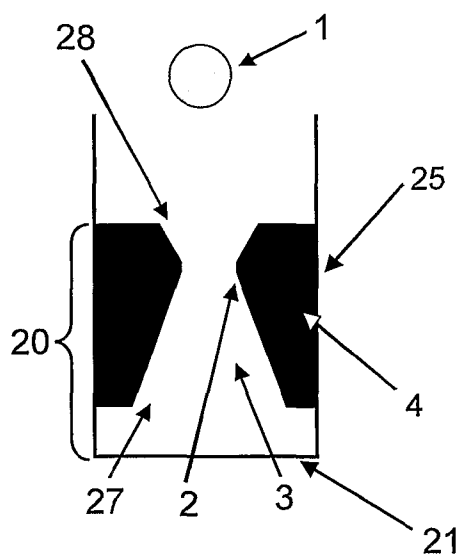
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(54) Title: APPARATUS FOR PERFORMING A REACTION IN A DROPLET AND METHOD OF USING THE SAME



(57) Abstract: An apparatus for processing a biological and/or chemical sample in a liquid droplet (1) is provided. The apparatus includes a processing compartment (20), a base (21) and at least one circumferential wall (25). The processing compartment (20) is defined by at least a part of the base (21), at least a part of the circumferential wall (25) and an inlet member (4). The inlet member (4) is located on top of the processing compartment (20), and includes at least one droplet inlet channel (3), which extends through the inlet member (4) and includes a contraction (2) between the inlet opening (28) of the droplet inlet channel (3) to the environment and the outlet opening (27) to the processing compartment (20). There is furthermore provided a method of processing a biological and/or chemical sample in a liquid droplet (1). The method includes disposing a medium into the processing compartment (20) of the apparatus of the invention that is immiscible with the liquid droplet (1), so that the contraction (2) is immersed in the medium. The droplet (1) is disposed into the droplet inlet channel (3) such that it is located below the contraction (2) of the droplet inlet channel (3). A process is performed on the biological and/or chemical sample in the droplet (1).