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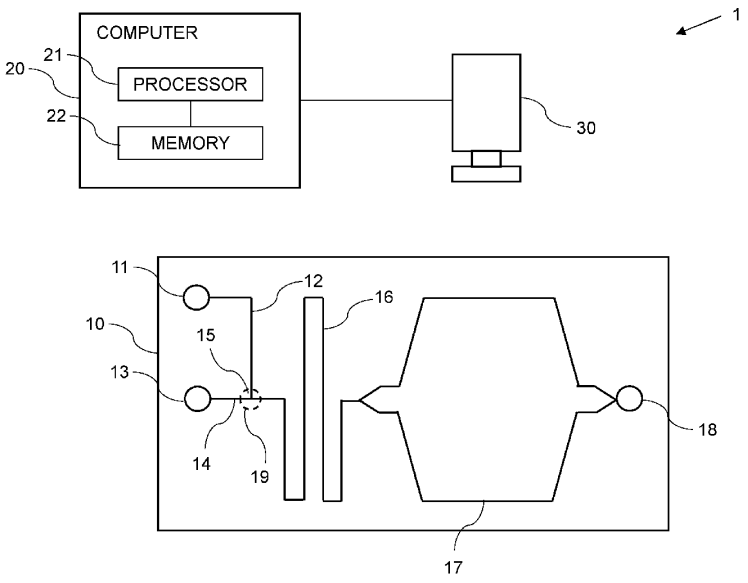


Fig. 11

(57) Abstract: A method and system (100) for detecting heteroresistance in a microbial population of microbes is the disclosed The method and system (100) generate droplets comprising at least one microbe and an antimicrobial agent, incubating the droplets in conditions supporting growth of the microbes in the droplets, monitor the size of the droplets during incubation and detect heteroresistance to the antimicrobial agent in the microbial population based on detection of a shrinkage in size of at least one droplet comprising at least one microbe but no shrinkage in size of at least one other droplet comprising at least one microbe.

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