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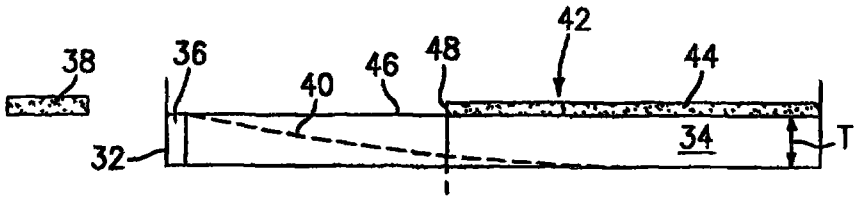
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(54) Title: METHOD FOR DETERMINING ANTIBIOTIC SENSITIVITY OF BACTERIA



(57) Abstract

A method and apparatus for determining the minimum inhibitory concentration of an antibiotic for a target microorganism are provided. The method includes the steps of: (a) providing a microorganism growth medium (14, 34); (b) providing a sensible reagent (17, 36), which includes an antibiotic mixed with a marker, the marker having a signal with a magnitude proportional to the marker's concentration; (c) incorporating the reagent into the growth medium, in a manner that creates a gradient of concentrations (18, 40) of the antibiotic and marker within the growth medium; (c) inoculating the growth medium with the target microorganism; (d) incubating the inoculated growth medium for a period of time sufficient for the target microorganism to grow a detectable amount on a first section (20, 42) of growth medium; (e) determining a growth boundary (28, 48) between the first section of growth medium having detectable target microorganism growth and a second section (24, 46) having substantially no detectable target microorganism growth; (f) measuring the signal magnitude at the growth boundary; and (g) determining a minimum inhibitory concentration of the antibiotic using the measured signal magnitude.