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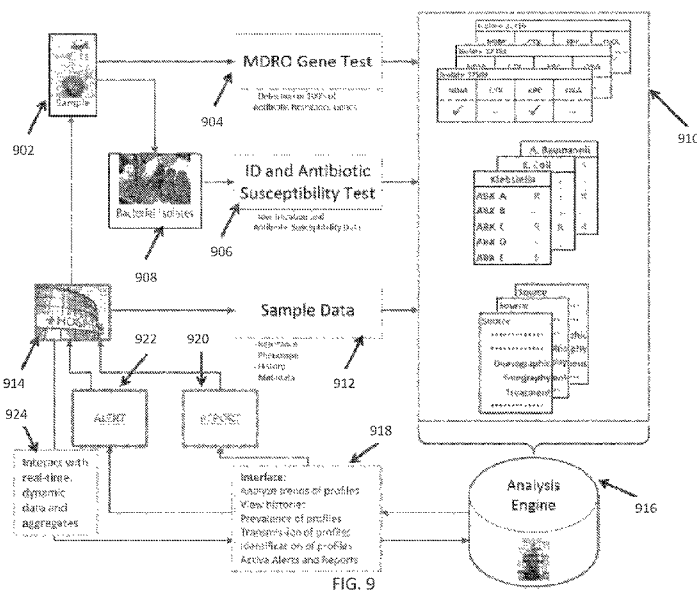
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(54) Title: SYSTEMS, APPARATUS, AND METHODS FOR GENERATING AND ANALYZING RESISTOME PROFILES



(S7) Abstract: Systems, apparatus, and methods are disclosed for generating a resistome profile for a subject, monitoring an infection state of one or more subjects, and/or identifying a potential infection outbreak at a facility, for example, by obtaining first data representative of at least one measure of antibiotic resistance of an organism from a first sample, identifying the organism, determining at least one of an antibiotic susceptibility phenotype, an identity of an antibiotic resistance gene, and an antibiotic to which the organism is non-susceptible, generating and comparing a first pattern to at least one known pattern to determine and generate a profile uniqueness identifier indicating a degree of similarity above a threshold between the first pattern and the at least one known pattern.