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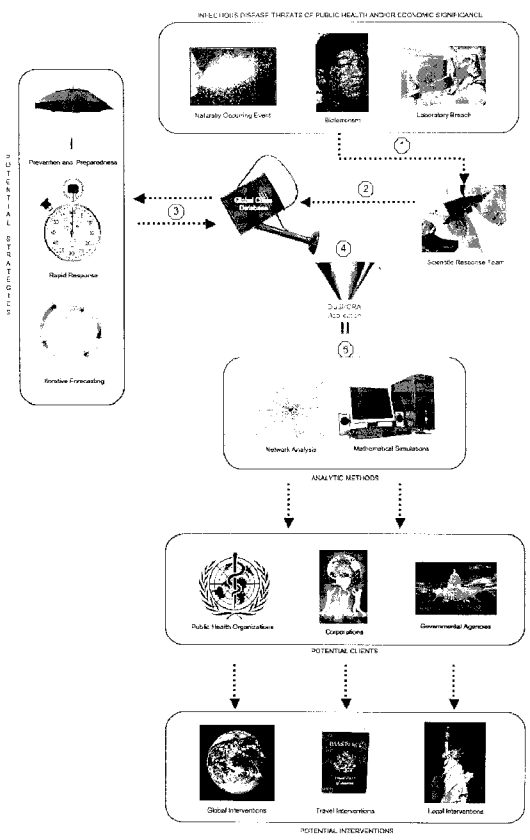
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(54) **Title:** SYSTEM AND METHOD TO PREDICT THE GLOBAL SPREAD OF INFECTIOUS AGENTS VIA COMMERCIAL AIR TRAVEL



- FIGURE 2 -

(57) **Abstract:** The invention comprises a system for predicting transmission of an infectious agent via air travel, comprising: a) a database, the database containing air passenger travel data for air travel between origin cities and destination cities, the air passenger travel data including: frequency of flights from origin cities to destination cities, number of passengers traveling from origin cities to destination cities, number of direct non-stop flights from origin cities to destination cities, total passenger traffic for origin and destination cities, and corresponding date stamps for all air passenger travel data; b) a modeling engine operative to map the air passenger travel data with the infectious agent to determine the probability of infection of an individual destination city from an individual origin city via air travel; and c) a reporting engine operative to produce a probability of infection of the individual destination city from the individual origin city at a given time based on said map.

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