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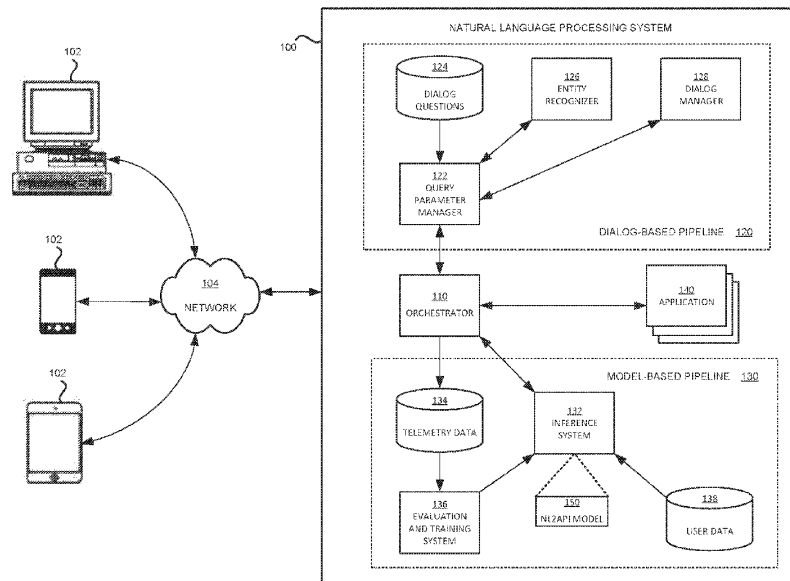


Fig. 1

(57) Abstract: Systems and methods are provided for obtaining a corpus of training data based on a plurality of natural language processing sessions, wherein the corpus of training data comprises a plurality of training data input vectors and a plurality of reference data output vectors, wherein a reference data output vector of the plurality of reference data output vectors represents a travel-based search request as a desired output to be generated from a training data input vector, of the plurality of training data input vectors, representing a natural language query regarding a travel reservation, training a natural-language-to-API model using the corpus of training data, wherein the natural-language-to-API model is trained to generate predicted travel-bases search requests using natural language query input.

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WO 2024/211152 A1

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