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(54) Title: NATURAL LANGUAGE PROCESSING SYSTEM

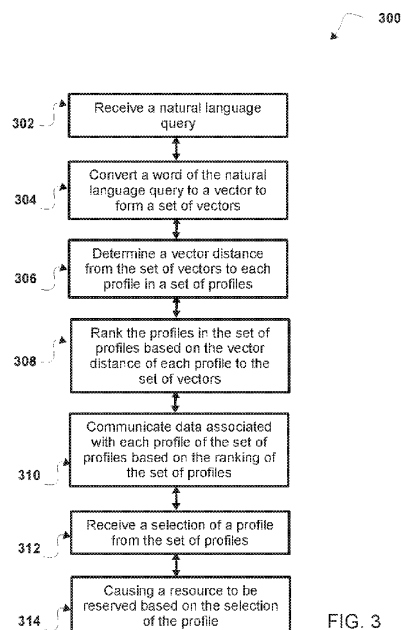


FIG. 3

(57) Abstract: Provided is a natural language processing system for determining a merchant based on a natural language query. The system may include a processor to receive a natural language query, convert at least one word of the natural language query to a vector using at least one neural network to form a set of vectors, determine a vector distance from the set of vectors to each profile in a set of profiles, rank the set of profiles based on the vector distance of each profile to the set of vectors, communicate merchant data associated with at least one merchant included in the set of profiles to the user device, receive a selection of a first merchant associated with the merchant data from the user device, and schedule an appointment with the first merchant for a user of the user device. A computer program product and method are also disclosed

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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