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(54) Title: PARALLEL HYPOTHETICAL REASONING TO POWER A MULTI-LINGUAL, MULTI-TURN, MULTI-DOMAIN VIRTUAL ASSISTANT

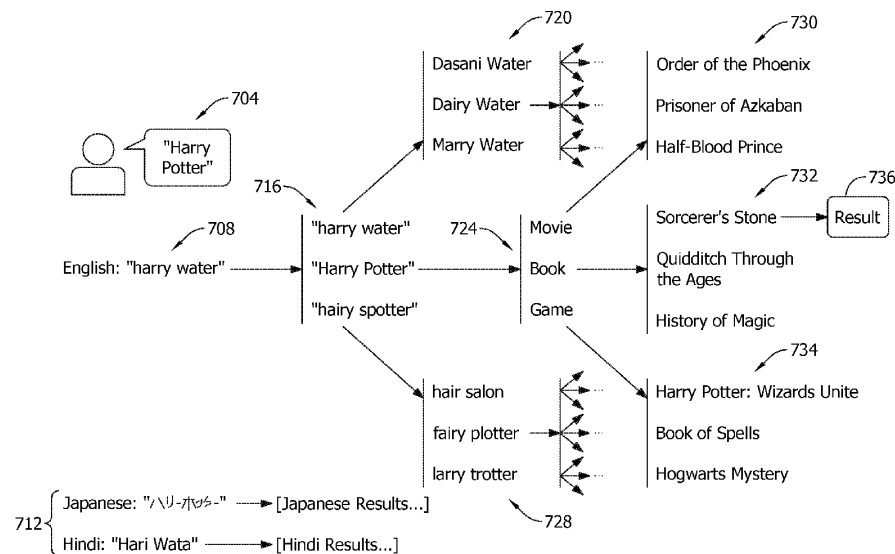


FIG. 7

(57) Abstract: A virtual assistant system comprising an interface configured to receive user input and provide a response to the user and a processor configured to run machine executable code. A memory storing non-transitory machine executable code configured to process the user input to generate two or more primary interpretations and one or more secondary interpretations based on one or more of the two or more primary interpretations. The code is also configured to process the primary interpretations and alternative interpretations to generate results which lead to two or more terminal states and then score the two or more terminal states to rank the two or more terminal states such that a top ranked terminal state is the top result, which is presented to the user. A transceiver may communicate over a network to a second device configured to assist the virtual assistant system in generating the top result for the user.

[Continued on next page]

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