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(54) **GUIDANCE DEVICE FOR THE SENSORY IMPAIRED**

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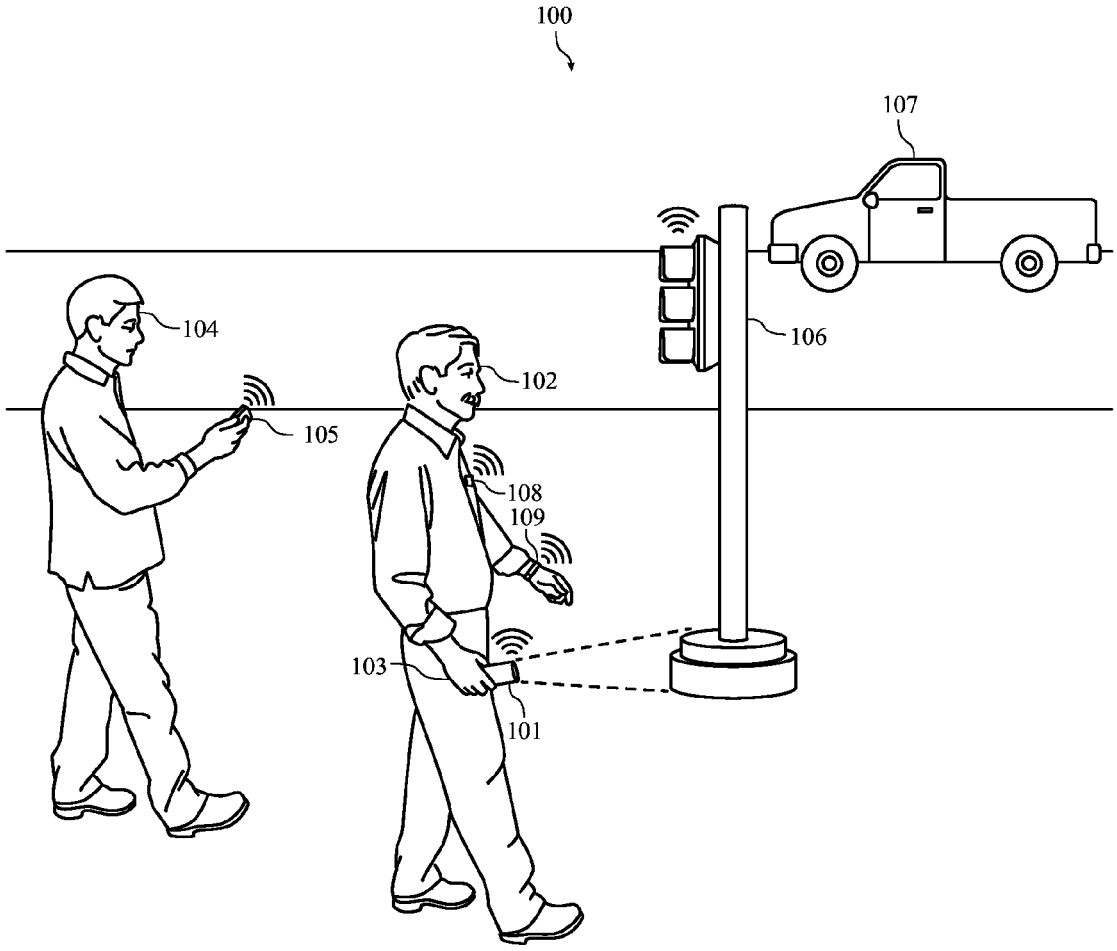
(57) **ABSTRACT**

Sensor data is obtained regarding an environment around a guidance device. A model of the environment is generated based on the data. The model is mapped at least to an input/output touch surface of the guidance device. Tactile output is provided to a user of the guidance device via the input/output touch surface based at least on the mapping. Other output based on the model may also be provided. The guidance device may include a variety of different components such as sensors that obtain data regarding the environment, input/output mechanisms for receiving input from and/or providing input to the user, processing units and/or other components for generating the model and/or mapping the model to various input/output mechanisms, and so on. Additionally, the guidance device may cooperate and/or communicate with a variety of different electronic devices that have one or more such components in order to perform such functions.