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(54) SYSTEM AND PROCESS FOR SELECTING **OBJECTS IN A UBIQUITOUS COMPUTING ENVIRONMENT**

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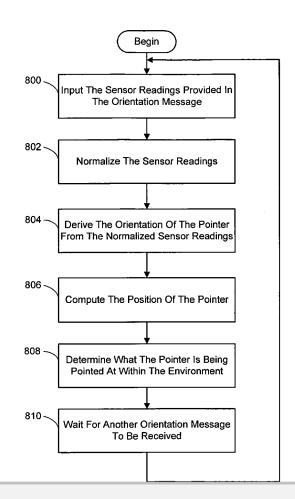
Related U.S. Application Data

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Publication Classification

- (57)**ABSTRACT**

A system and process for selecting objects in an ubiquitous computing environment where various electronic devices are controlled by a computer via a network connection and the objects are selected by a user pointing to them with a wireless RF pointer. By a combination of electronic sensors onboard the pointer and external calibrated cameras, a host computer equipped with an RF transceiver decodes the orientation sensor values transmitted to it by the pointer and computes the orientation and 3D position of the pointer. This information, along with a model defining the locations of each object in the environment that is associated with a controllable electronic component, is used to determine what object a user is pointing at so as to select that object for further control actions.





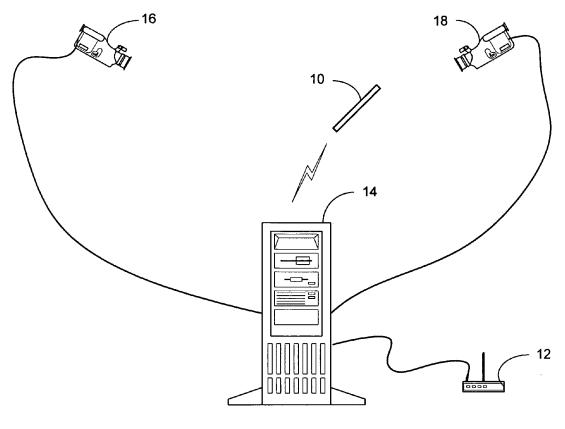


FIG. 1

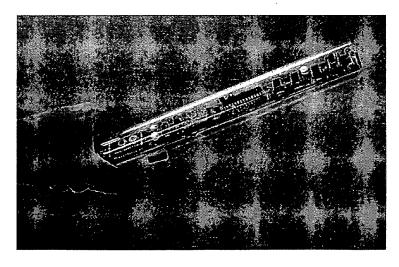


FIG. 2

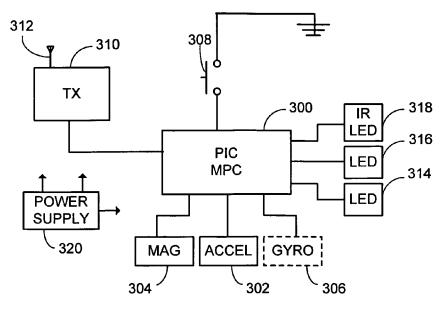


FIG. 3

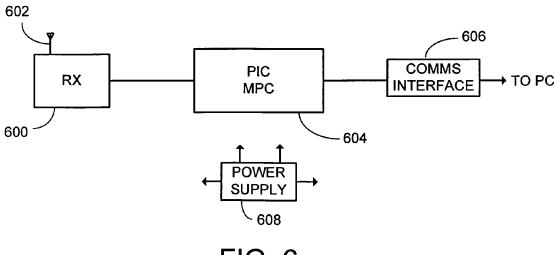


FIG. 6

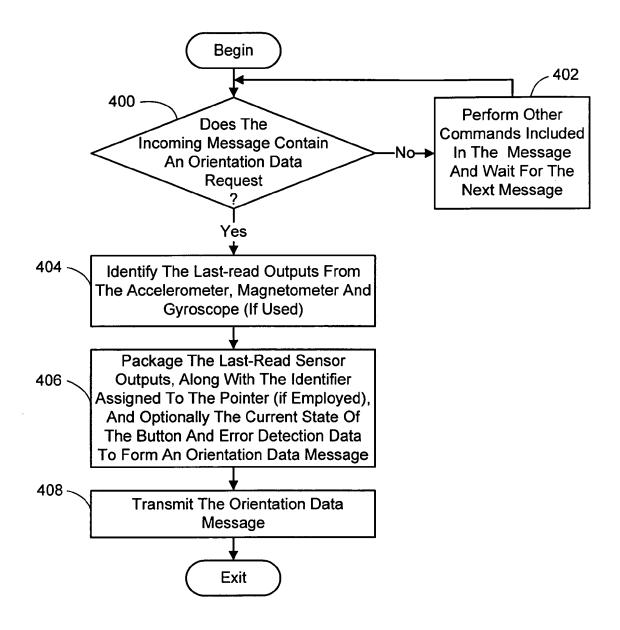
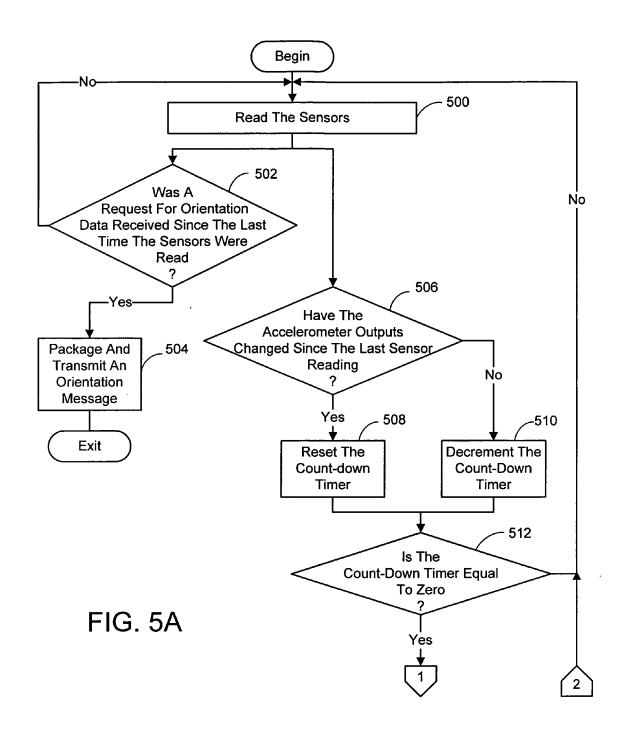


FIG. 4



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