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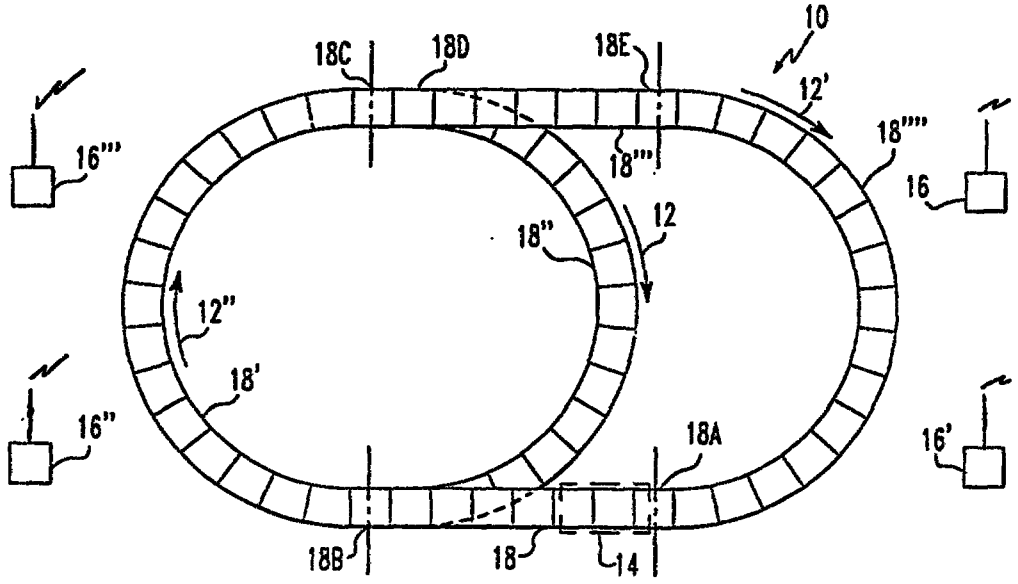
(54) Title: COMMUNICATION BASED VEHICLE POSITIONING REFERENCE SYSTEM



(57) Abstract

A communication based vehicle positioning reference system that includes a vehicle path. The vehicle path is divided into regions, wherein the regions contain a portion of the vehicle path. Each portion of the vehicle path contained within a respective region is defined by one or more segments. A position of a vehicle on the vehicle path is identified by a local coordinate system S_{xyz}, where S is a vehicle identifier, $_x$ is a specific region, $_y$ is a specific segment contained within the region and $_z$ is the position of the vehicle within the specific segment. The vehicle path can be represented on a map. Each of the segments can be identified by a character string that includes the indicia relating to the region the segment is located and a segment name. A plurality of computers can be provided which include only a portion of the map. Also disclosed is a method for identifying the position of a vehicle along a vehicle path.