

**SYSTEM AND METHOD FOR POSITIONING AND NAVIGATION
OF AN OBJECT**

ABSTRACT

A positioning system and method for determination of location data of an object are described. The positioning system includes one or more transmitting units configured to transmit a multi-frequency signal that comprises at least two different signal frequency components. The positioning system also includes a receiver system mounted on the object, and configured to receive the multi-frequency signals from the transmitting units, and to determine phases of each signal frequency component of the multi-frequency signal. The positioning system also includes a processing system configured to receive the phases of each signal frequency component of the multi-frequency signal, and to determine a distance between the transmitting units and the object, and the location data of the object.

Fig. 1