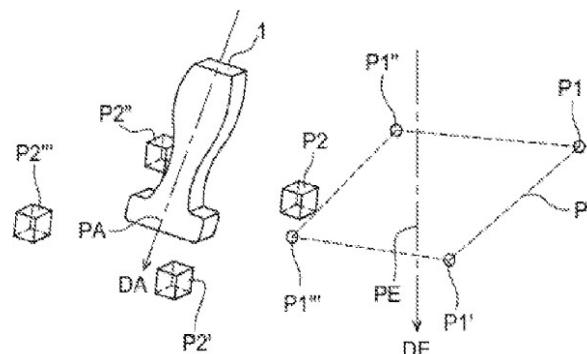


# METHOD AND SYSTEM FOR GUIDING A USER, HOLDING IN ONE HAND AN ULTRASONIC OBSERVATION PROBE, TOWARDS A PRERECORDED ACOUSTIC WINDOW

## Technological advantages

- Method can be used by non-expert people for handling an ultrasonic observation probe.



## Invention synthesis

The invention relates to a simple and accurate guiding process helping non-expert users in using an ultrasonic observation probe, especially in the medical domain. Before hand, an expert shall have recorded the correct orientation and location to properly use the probe. A first object attached to the probe possesses markers (2) indicating the current direction and position (A). Markers form an n-sided polygon. On a display, using augmented reality, markers forming a polygon are displayed indicating the transverse plane for the recorded target direction and position (E). The user can then deduce the required motion to have the current polygon aligned with the target. The positions and projection in augmented reality are displayed in real time as the user displaces the probe.

Probe in its current position and direction with markers in the current transverse plane, and markers in the target transverse plane for the prerecorded target position.

1) Probe  
 PA,DA) Current position and direction  
 PE,DE) Prerecorded target position and direction  
 P1,P1',P1'',P1''') Polygon vertices in the transverse plane for the prerecorded target position  
 P2,P2',P2'',P2''') Polygon vertices in the transverse plane for the current position

## Commercial benefits

- Novice users can perform medical imagery using an ultrasonic observation probe.
- Time gain.
- Reduction in costs related to medical imagery.

## Potential applications

- Medical domain : ultrasonic observation probe.

Patented invention - under license.