

Title (en)  
METROLOGY METHOD AND DEVICE FOR CALIBRATING THE GEOMETRY OF A NETWORK OF UNDERWATER ACOUSTIC BEACONS

Title (de)  
METROLOGIEVERFAHREN UND VORRICHTUNG ZUR KALIBRIERUNG DER GEOMETRIE EINES NETZWERKES AUS  
UNTERWASSERAKUSTIKBAKEN

Title (fr)  
PROCÉDÉ ET DISPOSITIF DE MÉTROLOGIE POUR LA CALIBRATION DE LA GÉOMÉTRIE D'UN RÉSEAU DE BALISES ACOUSTIQUES  
SOUS-MARINES

Publication  
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Application  
**EP 14738544 A 20140528**

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Abstract (en)  
[origin: WO2014195610A1] The invention relates to a metrology method and device for calibrating the geometry of a network of Nb stationary underwater acoustic beacons (11, 12, 13, 14) defining a field of beacons, implementing a moving body (20) comprising means for receiving acoustic signals from each of the beacons of the network, respectively. According to the invention, the metrology method includes the following steps: acquiring Nm series of Nb acoustic measurements of the relative distance between the moving body and each beacon of the network, respectively, during a movement of the moving body; calculating a numeric function C from the series of acoustic measurements of the relative distances and parameters representing relative positions of the beacons; executing an algorithm for minimising the numeric function C in order to deduce therefrom an estimation of the values of the relative position parameters of each of the beacons of the network.

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Cited by  
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