

Title (en)  
DEVICE AND METHOD FOR NAVIGATION

Title (de)  
NAVIGATIONSVORRICHTUNG UND -VERFAHREN

Title (fr)  
DISPOSITIF ET PROCÉDÉ DE NAVIGATION

Publication  
**EP 4281729 A1 20231129 (EN)**

Application  
**EP 21754949 A 20210730**

Priority  
EP 2021071362 W 20210730

Abstract (en)  
[origin: WO2023006213A1] For continuous and smooth localization in an area, a supporting apparatus is provided. The supporting apparatus splits the area into multiple sub-areas and generates one or more reference positions in the area. For each reference position, the supporting apparatus computes one or more transformations that transform neighbouring 2D/3D maps of the sub-area around the reference position to ensure that the neighbouring 2D/3D maps are aligned. The one or more transformations are associated with the reference position and may be stored in a database. During navigation, a navigation apparatus determines a closest reference position based on a current position, and obtains associated one or more transformations. Then, the navigation apparatus dynamically stitches maps of neighbouring sub-areas based on the one or more transformations and provides navigation based on the stitched maps.

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