

Title (en)  
SONAR IMAGING SYSTEM WITH A SYNTHETIC APERTURE

Title (de)  
SONARABBILDUNGSSYSTEM MIT SYNTHETISCHER ÖFFNUNG

Title (fr)  
SYSTEME D'IMAGERIE SONAR A OUVERTURE SYNTHETIQUE

Publication  
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Application  
**EP 07766049 A 20070515**

Priority  
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Abstract (en)  
[origin: WO2007132126A1] The invention relates to a sonar system with a synthetic antenna, comprising: a sonar provided with transmission means and reception means and located on a mobile carrier, the reception means comprising a composite physical antenna having N transducers; an inertial central station which is arranged on the carrier and can measure instantaneous information relating to the position and orientation of the carrier; a common clock supplying a temporal signal enabling the synchronisation of both the inertial central station and the sonar; a means for determining the instantaneous speed of the carrier, the speed determined feeding the inertial central station in order to correct the drift thereof; and micronavigation means enabling an image of the marine life to be obtained by the formation of paths of the synthetic antenna from K operation returns of the sonar, taking into account the fact that the physical antenna movement during the displacement of the carrier is known in its entirety from the information measured by the inertial central station.

IPC 8 full level  
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Citation (search report)  
See references of WO 2007132126A1

Citation (examination)  
• FR 2851340 A1 20040820 - IXSEA OCEANO SAS [FR]  
• COOK D A ET AL: "Motion compensation of AUV-based synthetic aperture sonar", OCEANS 2003. MTS/IEEE PROCEEDINGS. CELEBRATING THE PAST, TEAMING TOWARD THE FUTURE. SAN DIEGO, CA, SEPT. 22 - 26, 2003; [OCEANS MTS/IEEE CONFERENCE PROCEEDINGS], COLUMBIA, MD : MARINE TECHN. SOC, US, 22 September 2003 (2003-09-22), pages 2143 - 2148Vol.4, XP031871087, ISBN: 978-0-933957-30-5, DOI: 10.1109/OCEANS.2003.178234

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