

Title (en)

RADAR/SONAR SYSTEM CONCEPT FOR EXTENDED RANGE-DOPPLER COVERAGE

Title (de)

RADAR/SONAR-SYSTEMKONZEPT FÜR ERWEITERTEN ENTFERNUNGS-DOPPLER-ERFASSUNGSBEREICH

Title (fr)

CONCEPT DE SYSTEME RADAR/SONAR POUR COUVERTURE DISTANCE/DOPPLER ETENDUE

Publication

**EP 0897544 A4 20000524 (EN)**

Application

**EP 97927606 A 19970430**

Priority

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- US 79674997 A 19970206

Abstract (en)

[origin: WO9742520A1] A method and apparatus for preventing the occurrence of range ambiguities and Doppler ambiguities in both a radar and sonar environment. A series of N pulses are produced, each of which contains a number of contagious subpulses. Each of the subpulses exhibits a different frequency than the remaining subpulses in that particular pulse. Furthermore, the order of appearance of the subpulses in each of the pulses is unique with respect to the remaining pulses in the series. A matched filter receiver (10) and Doppler processor (30) are used to provide auto correlations and cross correlations (R1-RN) to prevent the range ambiguities and Doppler ambiguities.

IPC 1-7

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IPC 8 full level

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**G01S 13/22** (2006.01); **G01S 13/24** (2006.01); **G01S 15/58** (2006.01); **G01S 15/89** (2006.01)

CPC (source: EP US)

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**G01S 13/24** (2013.01 - EP); **G01S 15/584** (2013.01 - EP); **G01S 15/8904** (2013.01 - EP)

Citation (search report)

- [XA] US 5347281 A 19940913 - LEWIS BERNARD L [US], et al
- See references of WO 9742520A1

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