

Information on Search Strategy - Pilot phase (see OJ 2015, A86)

The type of information contained in this sheet may change during the pilot for improving the usefulness of this new service.

Application Number

PCT/US2018/045825

TITLE: MULTI-MODE TRACKING DEVICE

APPLICANT: RAYTHEON BLACKBIRD TECHNOLOGIES, INC.

IPC CLASSIFICATION: G01S3/20

EXAMINER: Tancredi, Urbano

CONSULTED DATABASES: COMPDX, DOSYS, EPODOC, INSPEC, NPL, WPI, XPESP, XPI3E, XPIEE, XPION, XPNPL, XPSRNG

CLASSIFICATION SYMBOLS DEFINING EXTENT OF THE SEARCH:

IPC:

CPC: G01S3/20, G01S5/0072, H04B7/18504, H04B7/18528, G01S3/046, G01S5-APPLICATIONS-OBJECT OR PEOPLE TRACKING (G01S), G01S3/02/LOW, G01S3/38/LOW, G01S5/0284/LOW, H04B7/185/LOW

FI/F-TERMS:

KEYWORDS OR OTHER ELEMENTS FEATURING THE INVENTION:

Mobile handheld device for tracking other devices in line-of-sight (LoS) using RSSI. Device has LOS and beyond-LOS BLOS / NLOS communication hardware / capabilities. Using LOS communication hardware, RSSI of target device signal is measured during a full 360 degree turn by the user. Because of body shielding, highest RSSI corresponds to bearing to target. IMU measured azimuth angle & IMU dead reckoning position can be used to propagate bearing. Bearing to target is shown to user via a display on the device. When LoS with target is unavailable, target and own device share GPS positions, bearing is computed by position difference. BLOS / NLOS communication via satellite (e.g. Iridium short burst data SBD) and/or relay from UAS (drones).