

ABSTRACT**Method of detection in bistatic mode using non-cooperative passive radio transmissions**

The invention relates to the field of electromagnetic detection systems operating in bistatic mode, in particular to UHF/VHF bistatic radars.

- 5 The method according to the invention consists in the simultaneous use of signals transmitted by one or more transmitting sources on separate frequency channels. The method comprises in particular:
- a step of multichannel reception and separating channels,
 - a step of analysis of the signals received channel by channel, said
- 10 analysis being performed by correlation of the signals received with copies of the time and frequency shifted reference signals, the reference signals being constituted by the signals received from transmitting sources by direct transmission,
- a step of integration of the signals analysed, channel by channel,
- 15 - a step of detection.

The method according to the invention enables a signal to be used whose band-width is equal to the band covered by the set of channels used, which improves the contrast and distance resolution of the system implementing said method compared with the systems known from prior art.

20 Figure 2.