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(54) **RADIO LOCATION FINDING**

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ABSTRACT

Radio location finding A method of detecting a radio emission source (2) includes receiving three or more radio signal datasets from three or more respective sensors (3). Each sensor (3) corresponds to a physical location and includes at least one radio receiver (4). The three or more radio signal datasets include one or more directional datasets obtained using a directional antenna (9, 23) or a directional antenna array of the corresponding sensor, and two or more omnidirectional datasets, each obtained using an omnidirectional antenna (9, 22) or an omnidirectional antenna array of the corresponding sensor. The method also includes determining whether an emitter signal (8) within a target frequency range is present in any of the one or more directional datasets. The method also includes, for each directional dataset, in response to the emitter signal (8) is present in that directional dataset, carrying out a correlation based time-of-arrival location finding calculation based on that directional dataset and at least two further radio signal datasets.

