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**De Gaudenzi et al.**

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(54) **LOW COMPLEXITY ADAPTIVE INTERFERENCE MITIGATING CDMA DETECTOR**

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(57) **ABSTRACT**

An adaptive signal receiver comprising at least one blind detection unit arranged to be robust to asynchronous multiple access interference (MAI). The useful signal is detected using a user signature sequence comprised of a fixed term and a complex adaptive part having a length that extends over a number of samples within a defined observation window. Provision is made for updating automatically and periodically the complex adaptive part of the signature sequence.

**10 Claims, 27 Drawing Sheets**

