

ABSTRACT

ADAPTIVE RECEPTION TECHNIQUES FOR OVER-SAMPLED RECEIVERS

An over-sampled sequence detector operates on sampled data and tracks the detection reliability of the sampled data. The detector separately analyzes sample sequences for different sampling phases and then picks a sample sequence that allows
5 for the most reliable detection. For the different sampling phases, the detector inspects some amount of look-behind and look-ahead information in order to improve upon simple symbol-by-symbol detection. The over-sampled information is used to further improve detection performance.

Fig. 3