

Abstract

Voice Activity Detector

5 Speech is distinguished from noise by a spectral comparison
(114,115) of an input signal with a stored noise estimate
(113). Updating of the noise estimate (in a buffer 113) is
permitted during periods when speech is absent under control
of an auxiliary detector 200. In order to improve operation
10 in the presence of signals with strong harmonic components
(e.g. signalling tones) an LPC prediction gain is computed
from the input ($x(i)$) and a residual ($y(i)$) obtained from the
input following filtering by a filter (105) having a response
complementary to the frequency spectrum of the input, and if
15 the gain exceeds a threshold, buffer updating is suppressed.

Fig. 2.