

ABSTRACT

STEREO AUDIO SIGNAL DELAY ESTIMATION METHOD AND APPARATUS

A stereo audio signal delay estimation method and apparatus are disclosed. The method may
5 include: obtaining a current frame of a stereo audio signal (S401), where the current frame includes
a first channel audio signal and a second channel audio signal; and if a signal type of a noise signal
included in the current frame is a coherent noise signal type, estimating an inter-channel time
difference of the current frame by using a first algorithm (S403); or if a signal type of a noise signal
included in the current frame is a diffuse noise signal type, estimating an inter-channel time
10 difference of the current frame by using a second algorithm (S403). The first algorithm includes
weighting a frequency domain cross power spectrum of the current frame based on a first
weighting function, the second algorithm includes weighting a frequency domain cross power
spectrum of the current frame based on a second weighting function, and a construction factor of
the first weighting function is different from that of the second weighting function. Different ITD
15 estimation algorithms are used for stereo audio signals including different types of noise,
improving ITD estimation precision of the stereo audio signal.

Figure 4