Abstract

Reducing complexity of FIR filters using narrowband filters presents a practically efficient Narrowband FIR Filter designed by using Frequency Response Masking Technique & the Interpolated FIR technique. The Proposed method cascades the interpolated filter with masking filter. By giving the filter design coefficients (filter characteristics) we can determine the filters interpolated magnitude coefficients. & then this is given to Narrowband Filter will get the impulse response with less number of taps. At the last step we can remove the unwanted part by using the masking filter. LabVIEW software is used to implement the reduced complexity FIR filter using narrowband filter. It was shown that the resulting filter is practically efficient and also the errors in human Audiogram are minimized.

References

Reducing Complexity of FIR Filters using Narrowband Filters

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