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The modification of critical-band based frequency compression using cepstral analysis

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This study describes the modification of critical-band based frequency compression by Yasu et al. [Acoust. Sci. & Tech., 25(1):61-63, 2004]. It is known that the auditory filter shape of hearing impaired patients is wider than that of normal hearing, which causes the loss of frequency selectivity (Grasberg and Moore, 1986). We focused on the characteristics of wider auditory filter of hearing impairment and developed an algorithm, that we called "critical-band based frequency compression," to compensate for the interference of adjacent auditory filter.
