

SPECTRAL ESTIMATION USING SUBBAND DECOMPOSITION AND FREQUENCY WARPING

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ABSTRACT

This paper addresses the problem of frequency overlapping which occurs when spectral estimation is applied after subband decomposition. Subband decomposition has already been shown to increase the performances of spectral estimation but induced frequency overlapping may be troublesome. This paper proposes a new spectral estimation procedure based on subband decomposition and frequency warping which reduces the overlapping frequency problem. Simulations confirm the interest of this new algorithm.