

ABSTRACT**SYSTEMS, METHODS, AND APPARATUS FOR Highband Time Warping**

In one embodiment, a method of signal processing includes encoding a low-frequency portion of a speech signal into at least an encoded narrowband excitation signal and a plurality of narrowband filter parameters; and generating a highband excitation signal based on a narrowband excitation signal. The narrowband excitation signal is based on the encoded narrowband excitation signal. The method also includes encoding a high-frequency portion of the speech signal into at least a plurality of highband filter parameters according to at least the highband excitation signal. The encoded narrowband excitation signal includes a time warping, and the method includes applying a time shift to the high-frequency portion based on information related to the time warping.

Figures 1a and 1b