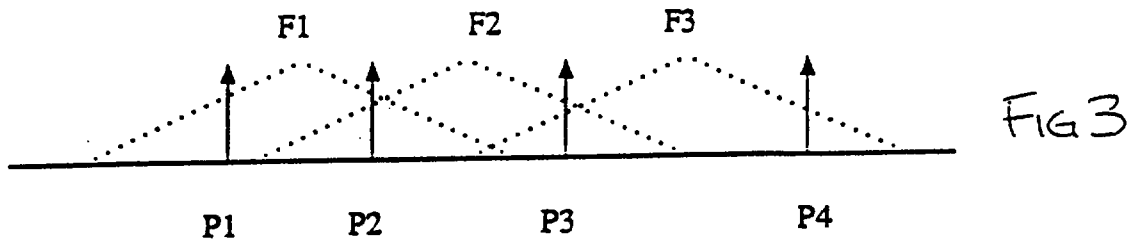
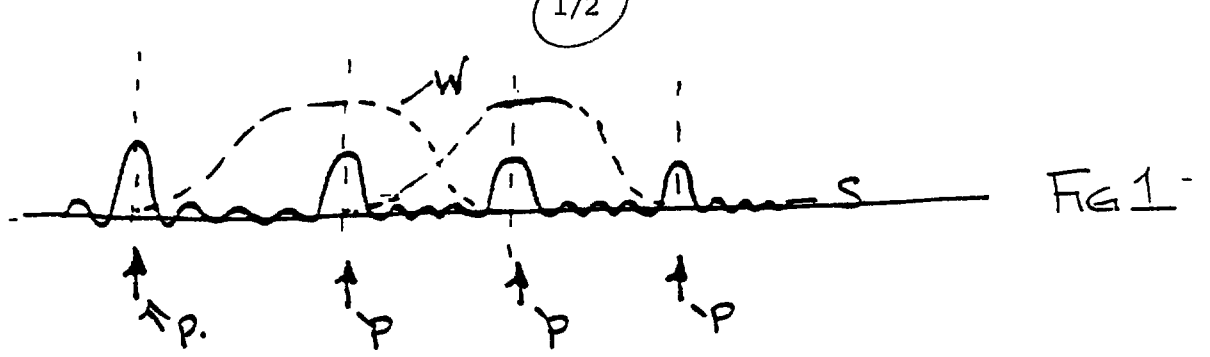


ABSTRACT

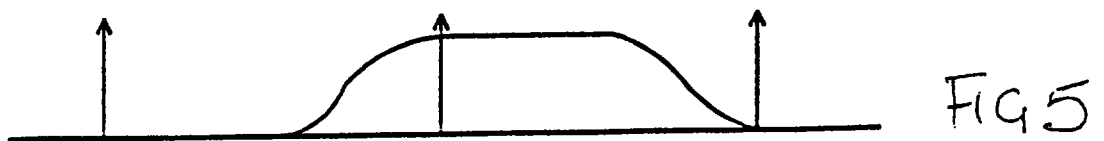
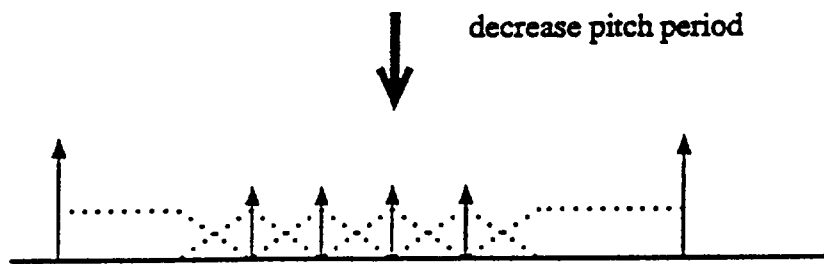
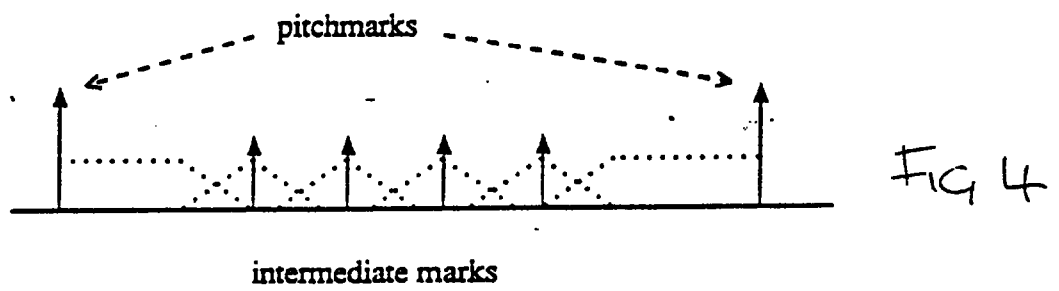
Speech Synthesis

The pitch of synthesised speech signals is varied by separating the speech signals into a spectral component and an excitation component. The latter is multiplied by a series of overlapping window functions synchronous, in the case of voiced speech, with pitch timing mark information corresponding at least approximately to instants of vocal excitation, to separate it into windowed speech segments which are added together again after the application of a controllable time-shift. The spectral and excitation components are then recombined. The multiplication employs at least two windows per pitch period, each having a duration of less than one pitch period. Alternatively each window has a duration of less than twice the pitch period between timing marks and is asymmetric about the timing mark.

Fig.1



P = pitchmark
F = frame



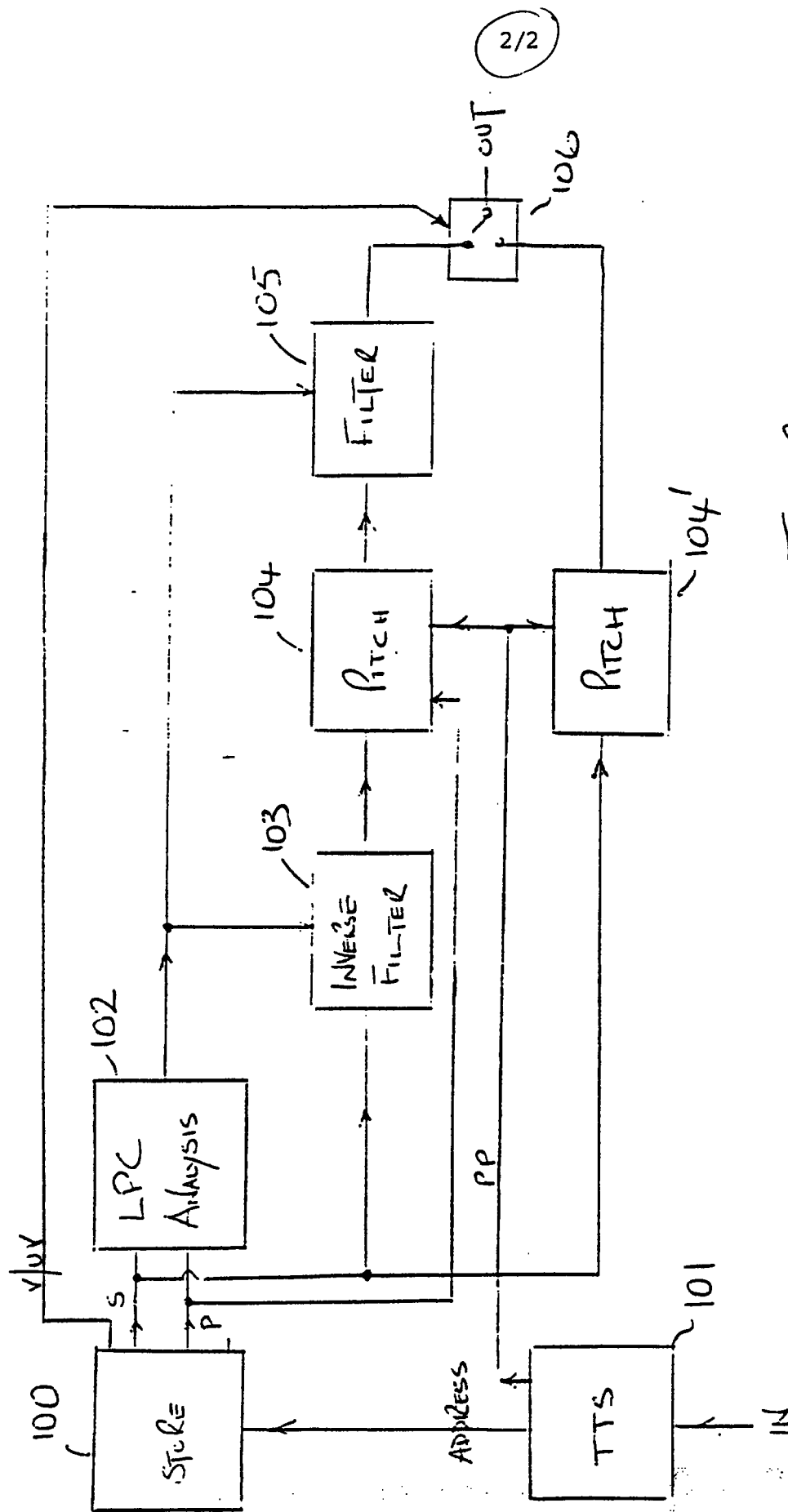


Fig 2