

ABSTRACT OF THE DISCLOSURE

**TITLE OF INVENTION: CODE EXCITATION LINEAR PREDICTIVE
(CELP) ENCODER AND DECODER**

There is provided a code excitation linear predictive (CELP) coding or decoding apparatus in which a code vector, which is transmitted by a codebook such as a stochastic codebook, is converted adaptively in accordance with vocal tract analysis information (LPC) so that a high quality reproduction speech is obtained at a low coding rate. Further, in order to obtain a similar effect, a pulse-like excitation codebook formed of an isolated impulse is provided in addition to the adaptive excitation codebook and stochastic excitation codebook so that either the stochastic excitation codebook or the pulse-like excitation codebook is selectively used to provide a vocal tract parameter as a linear spectrum pair parameter.