

Voice Coders (Vocoders)

In order to listen, what had been spoken precisely, we need a no. of representation levels.

But in practical scenario it is not so, even a representative level of wave form will suffice the purpose.

This analogy give a chance to design a transmission system at lower bit rate.

Vocoders are source coders which operate at a significantly lower rate than even ADM.

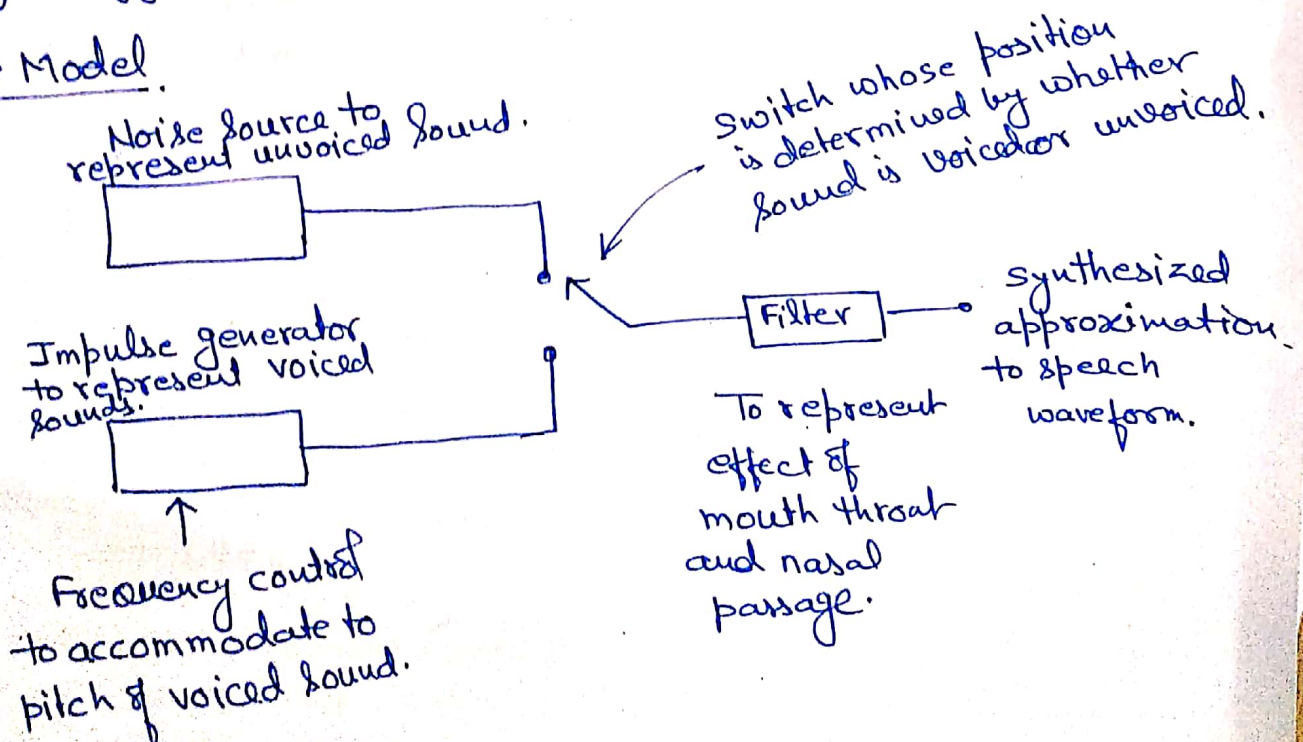
generally VOCODER bit rates are in the range 1.2 to 2.4 kbps.

However, the resulting reproduced voice has a synthetic sounding and a somewhat artificial quality.

VOCODERS are used in operator recorded message or IVR systems.

→ In order to design VOCODERS, we need to understand physiology of vocal cords,

Voice Model.



Types of vocoders →

- ① channel vocoders
- ② Linear Predictive coders
- ③ Multi Pulse Excited linear predictor
- ④ code Excited Linear Prediction
- ⑤ Mixed Excitation linear Prediction

for self study

channel vocoders →

In this encoding system, the spectrum of the i/p speech is divided into 15 frequency ranges each of BW 200 Hz.

