16 MAY 2005

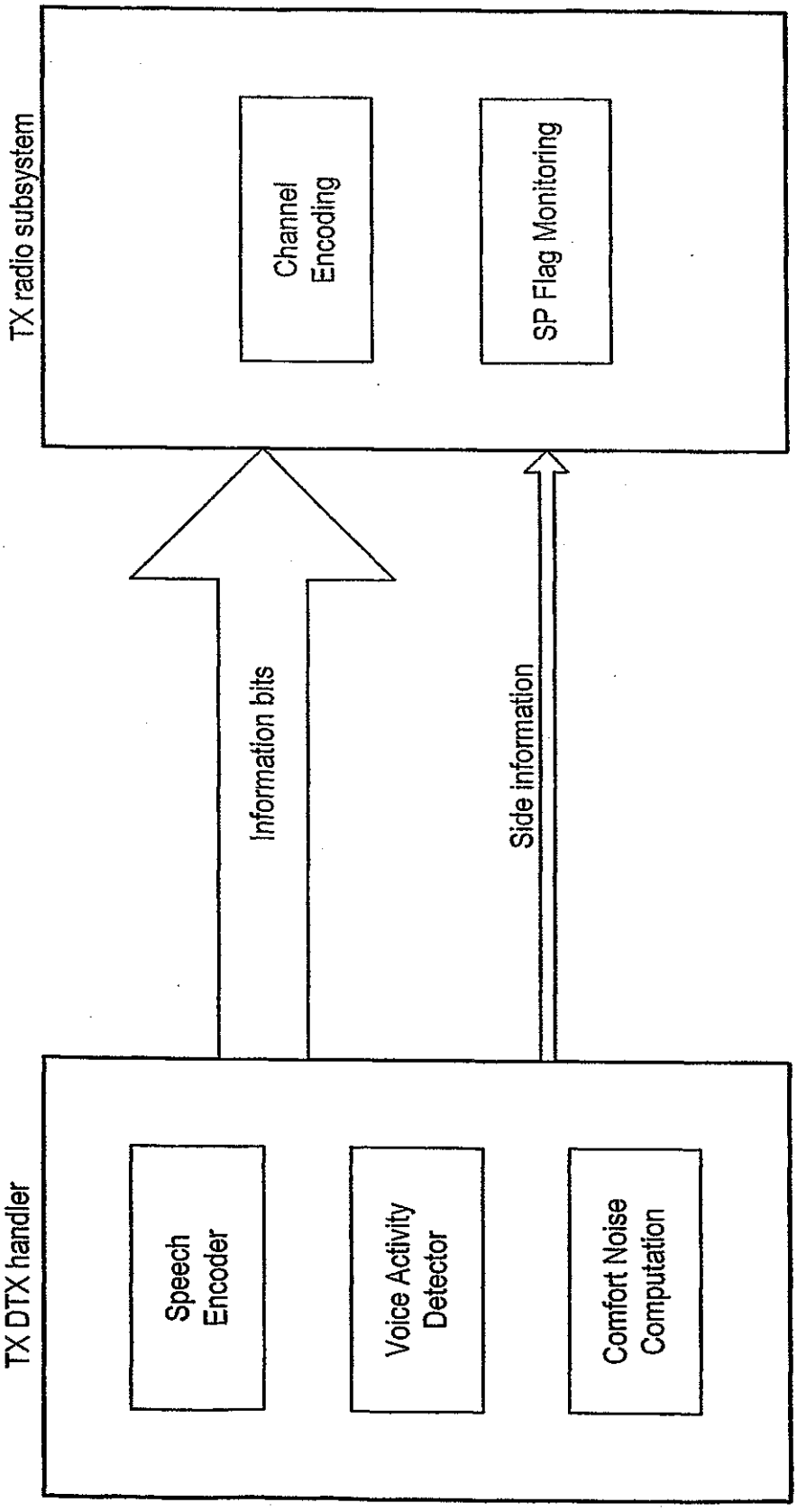


Fig. 1

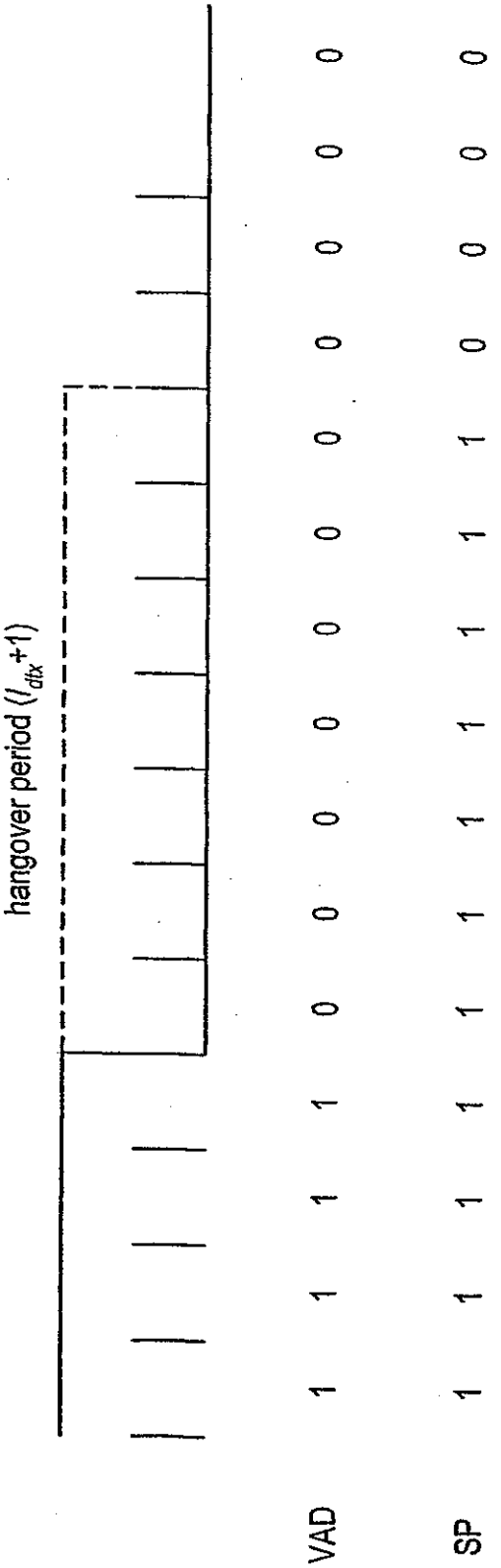

hangover period (l_{dtx}+1)
VAD
1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0
SP
1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0

Fig. 2

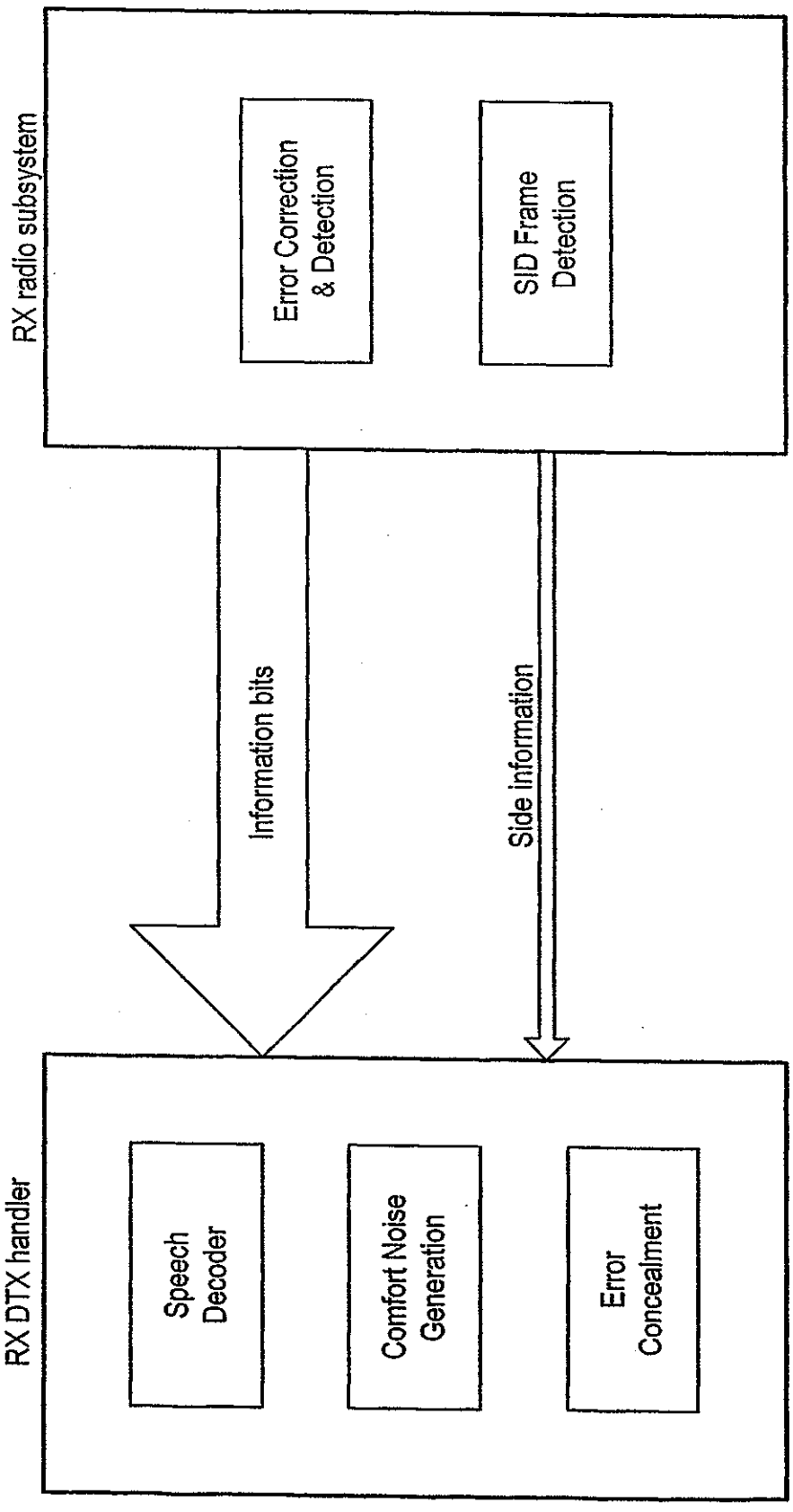

RX radio subsystem
Error Correction & Detection
SID Frame Detection
Information bits
Side information
RX DTX handler
Speech Decoder
Comfort Noise Generation
Error Concealment

Fig. 3

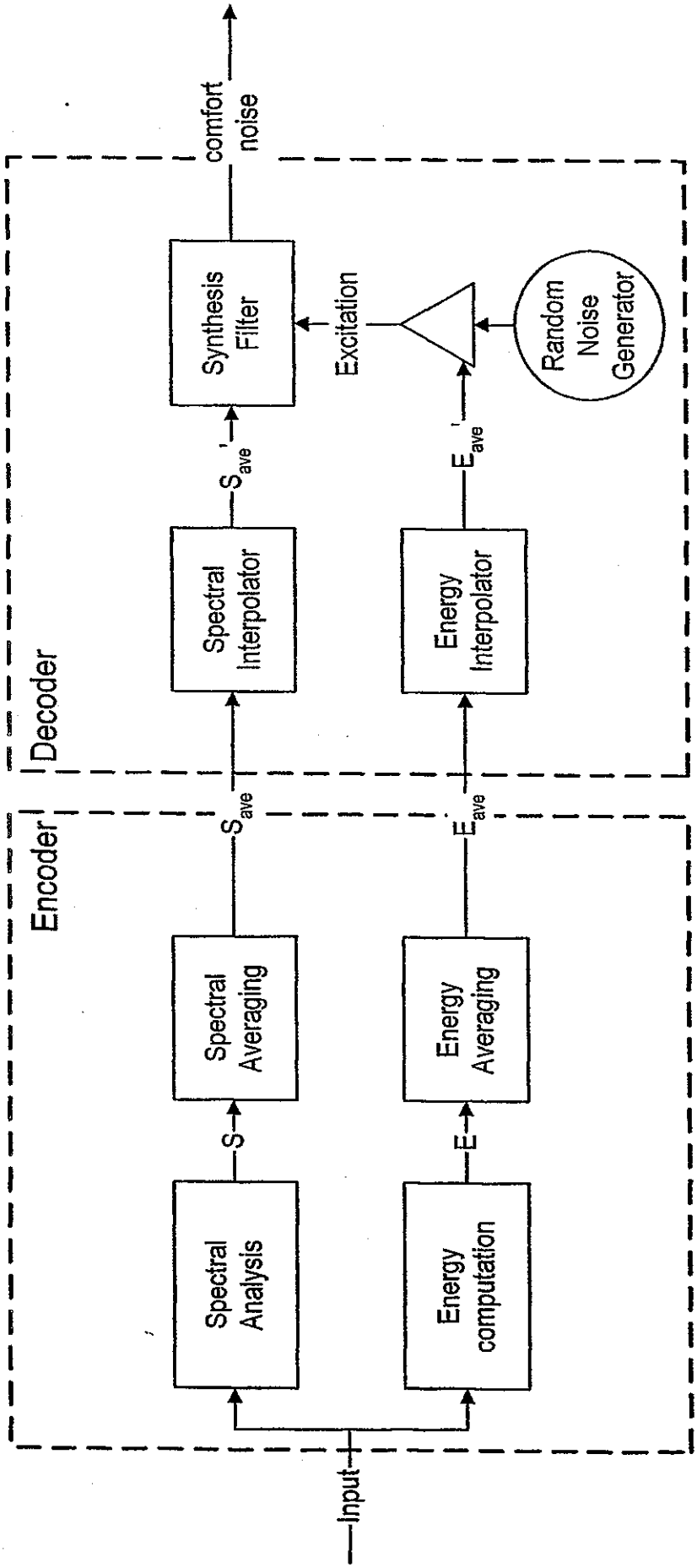

Input
Encoder
Spectral Analysis
Energy computation
S
E
Spectral Averaging
Energy Averaging
S_{ave}
E_{ave}
Decoder
Spectral Interpolator
Energy Interpolator
S'_{ave}
E'_{ave}
Synthesis Filter
Excitation
Random Noise Generator
comfort noise

Fig. 4

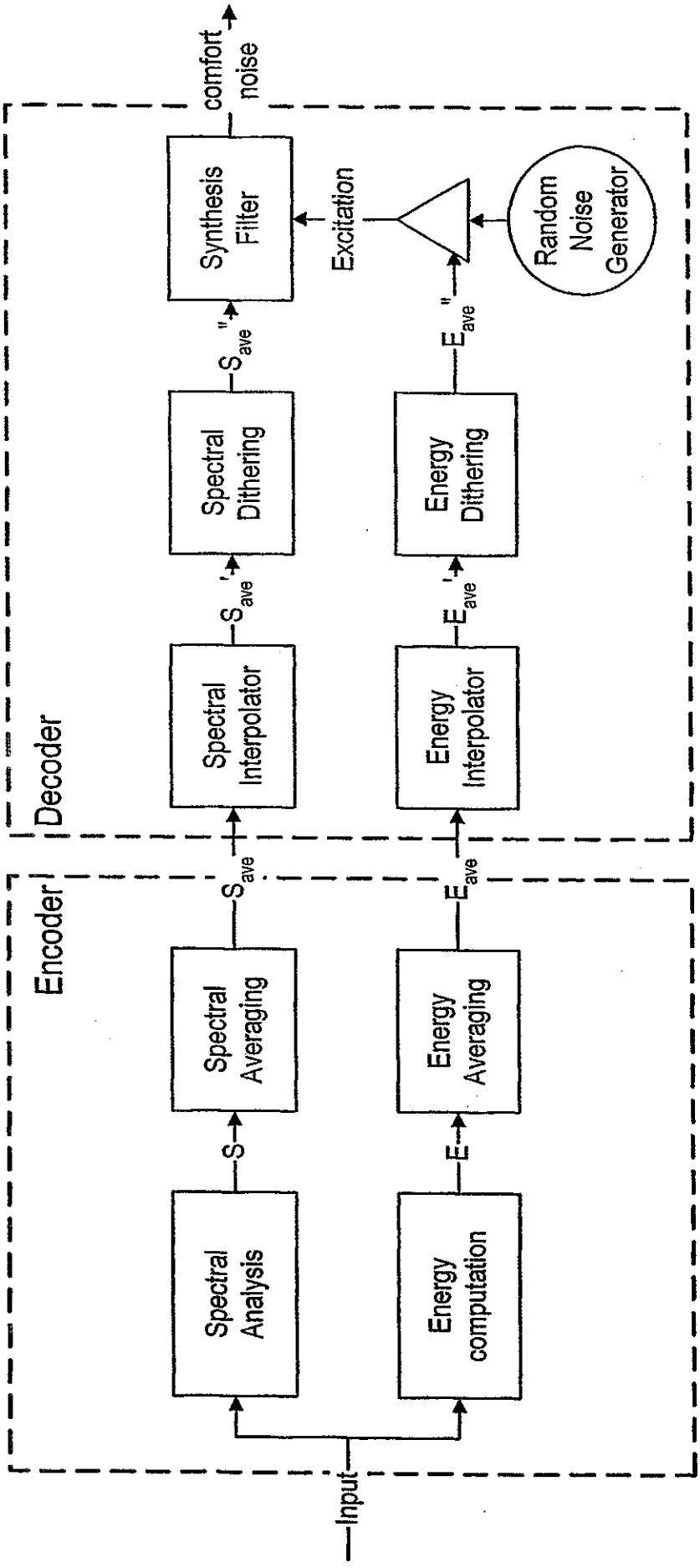

Input
Encoder
Spectral Analysis
Energy computation
S
E
Spectral Averaging
Energy Averaging
S_{ave}
E_{ave}
Decoder
Spectral Interpolator
Energy Interpolator
S_{ave}'
E_{ave}'
Spectral Dithering
Energy Dithering
S_{ave}''
E_{ave}''
Synthesis Filter
Excitation
Random Noise Generator
comfort noise

Fig. 5

16 MAY 2005

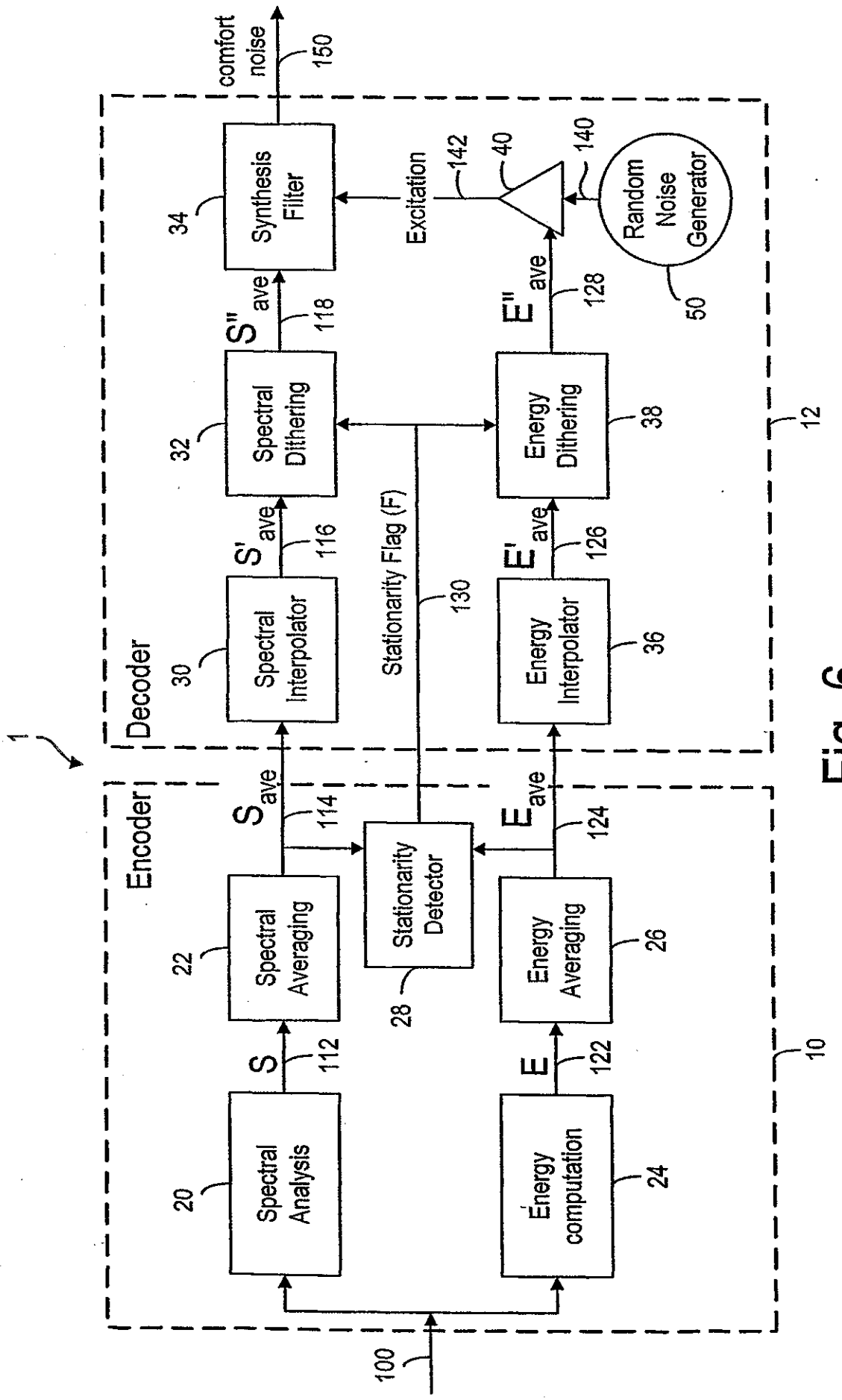


Fig. 6

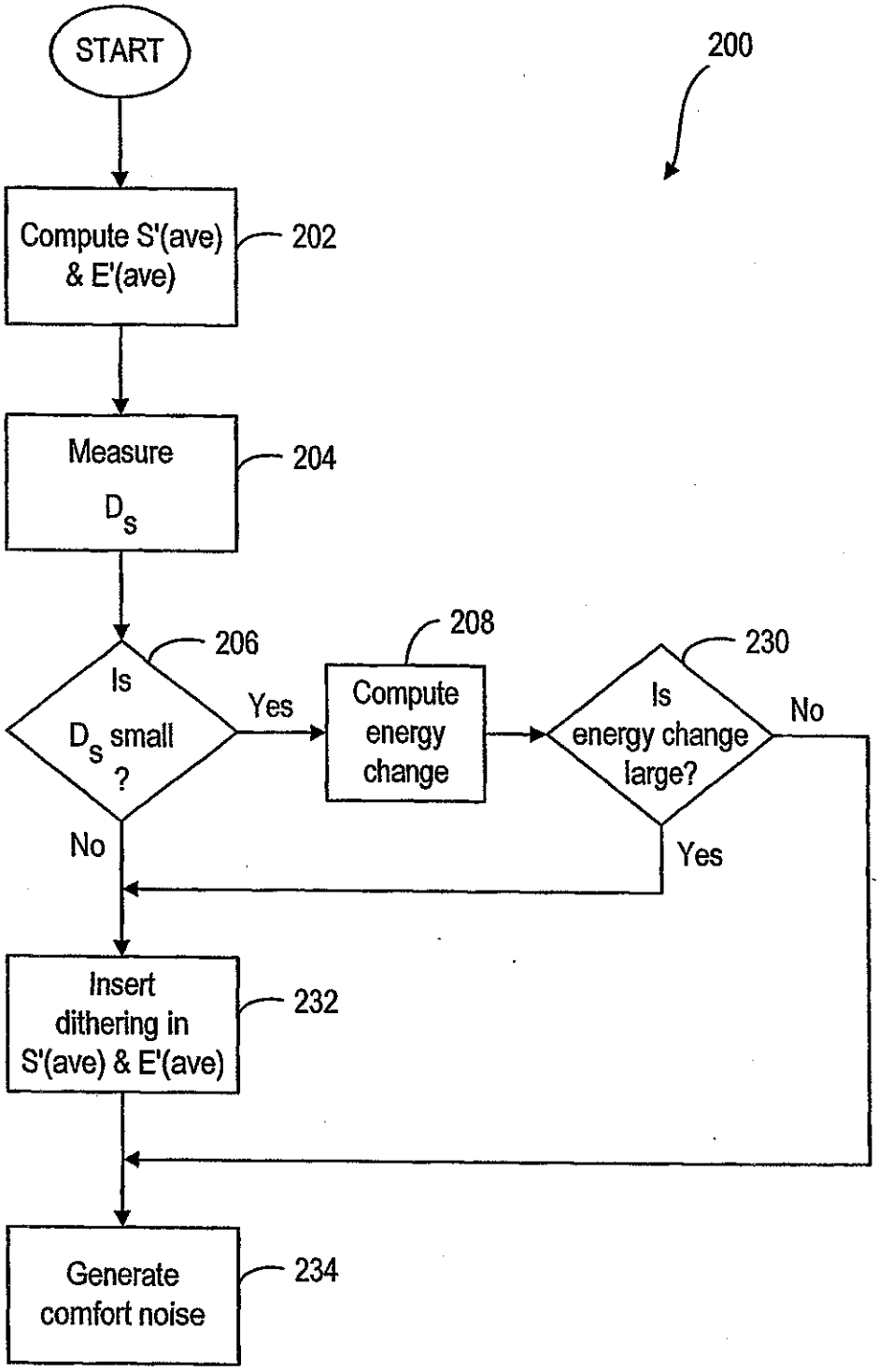

START
200
Compute S'(ave) & E'(ave)
202
Measure D_s
204
206
Is D_s small ?
Yes
208
Compute energy change
230
Is energy change large?
No
Yes
No
Insert dithering in S'(ave) & E'(ave)
232
Generate comfort noise
234

Fig. 7