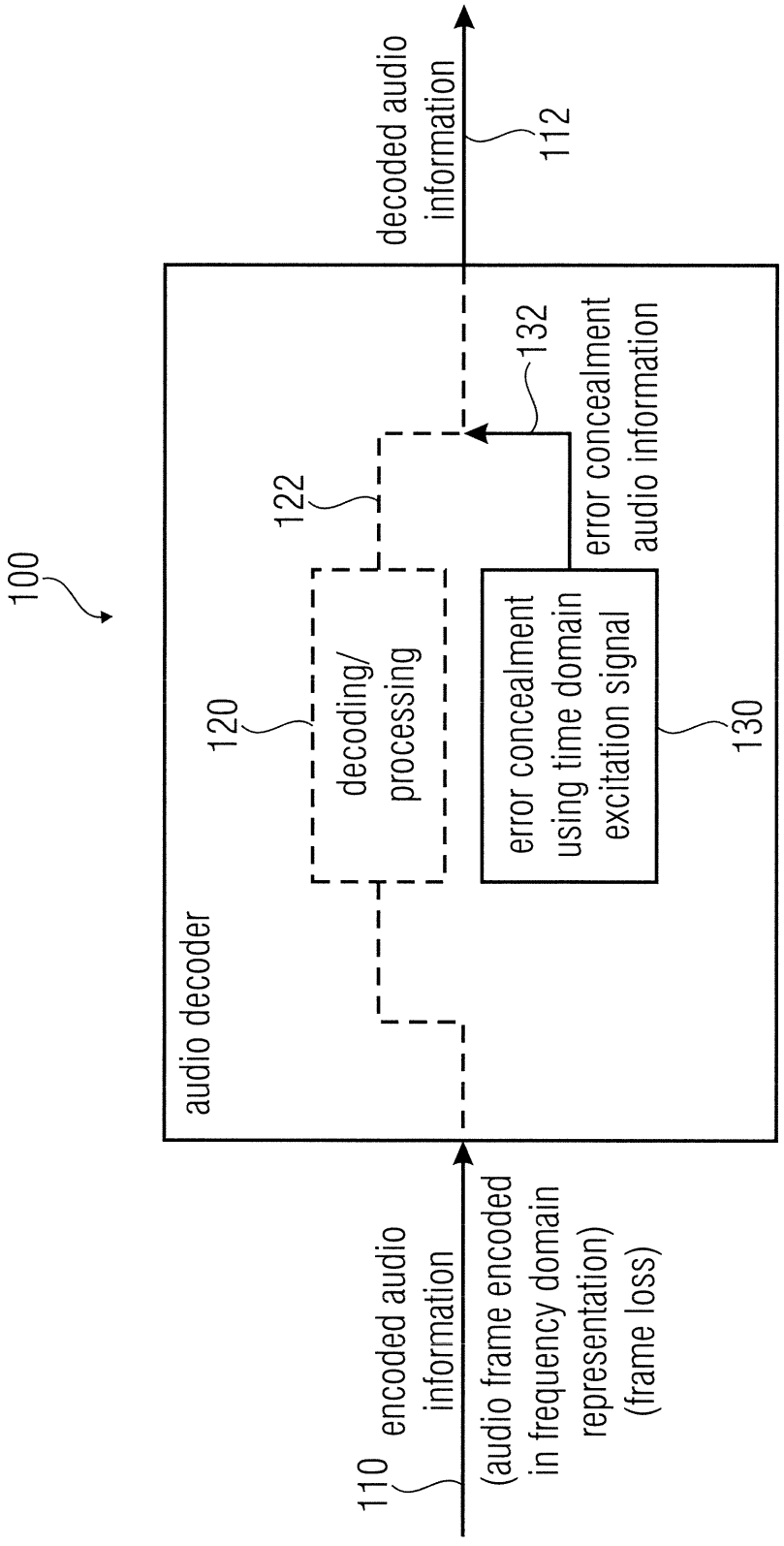

100
audio decoder
120
decoding/
processing
122
error concealment
using time domain
excitation signal
130
132
error concealment
audio information
decoded audio
information
112
110
encoded audio
information
(audio frame encoded
in frequency domain
representation)
(frame loss)

FIG 1

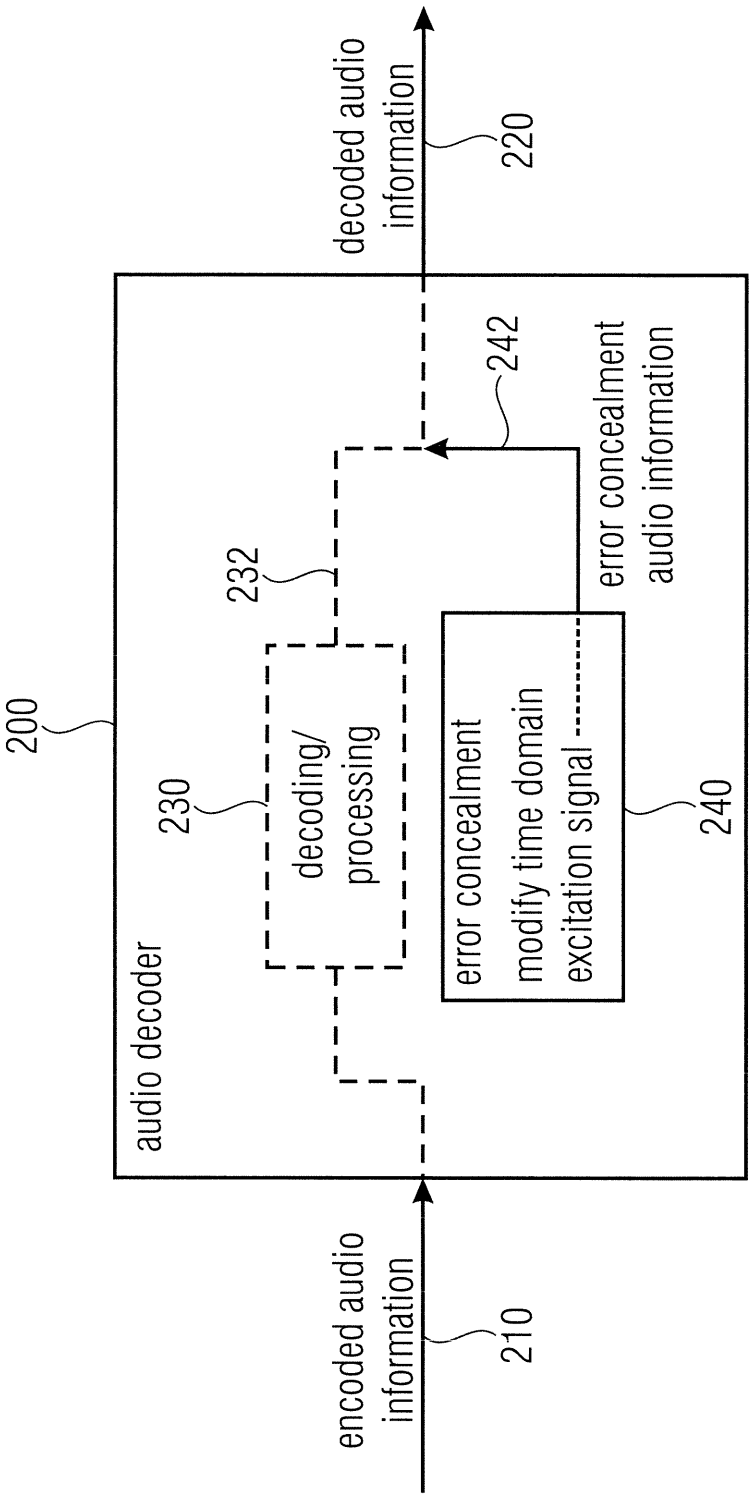

encoded audio information
210
audio decoder
200
decoding/ processing
230
232
error concealment modify time domain excitation signal
240
error concealment audio information
242
decoded audio information
220

FIG 2

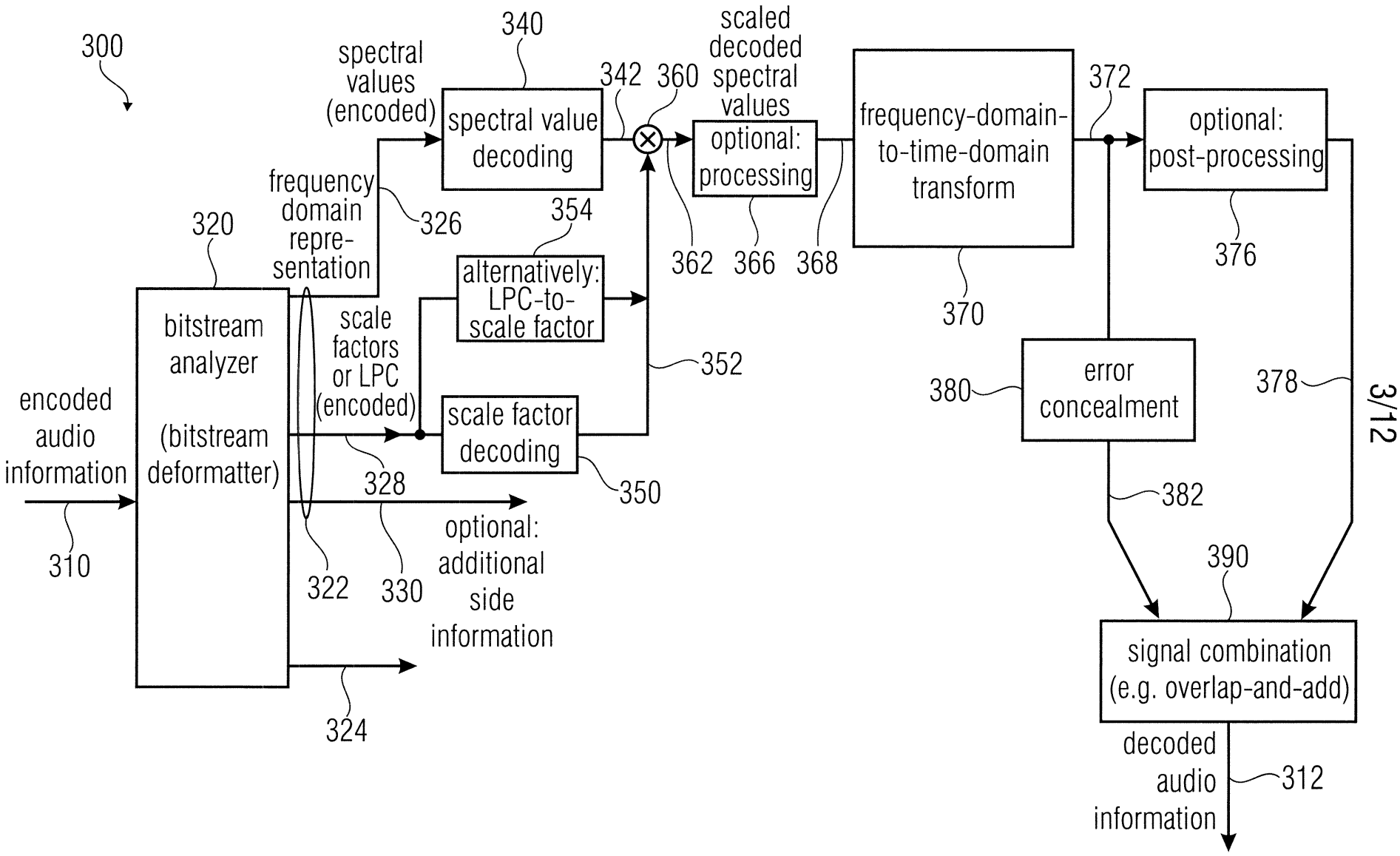

300
spectral values (encoded)
340
spectral value decoding
342
360
scaled decoded spectral values
optional: processing
frequency-domain-to-time-domain transform
372
optional: post-processing
frequency domain repre-sentation
326
354
alternatively: LPC-to-scale factor
362
366
368
370
376
320
bitstream analyzer
(bitstream deformatter)
scale factors or LPC (encoded)
352
encoded audio information
scale factor decoding
350
328
optional: additional side information
310
322
330
324
error concealment
380
378
382
390
signal combination (e.g. overlap-and-add)
decoded audio information
312

FIG 3

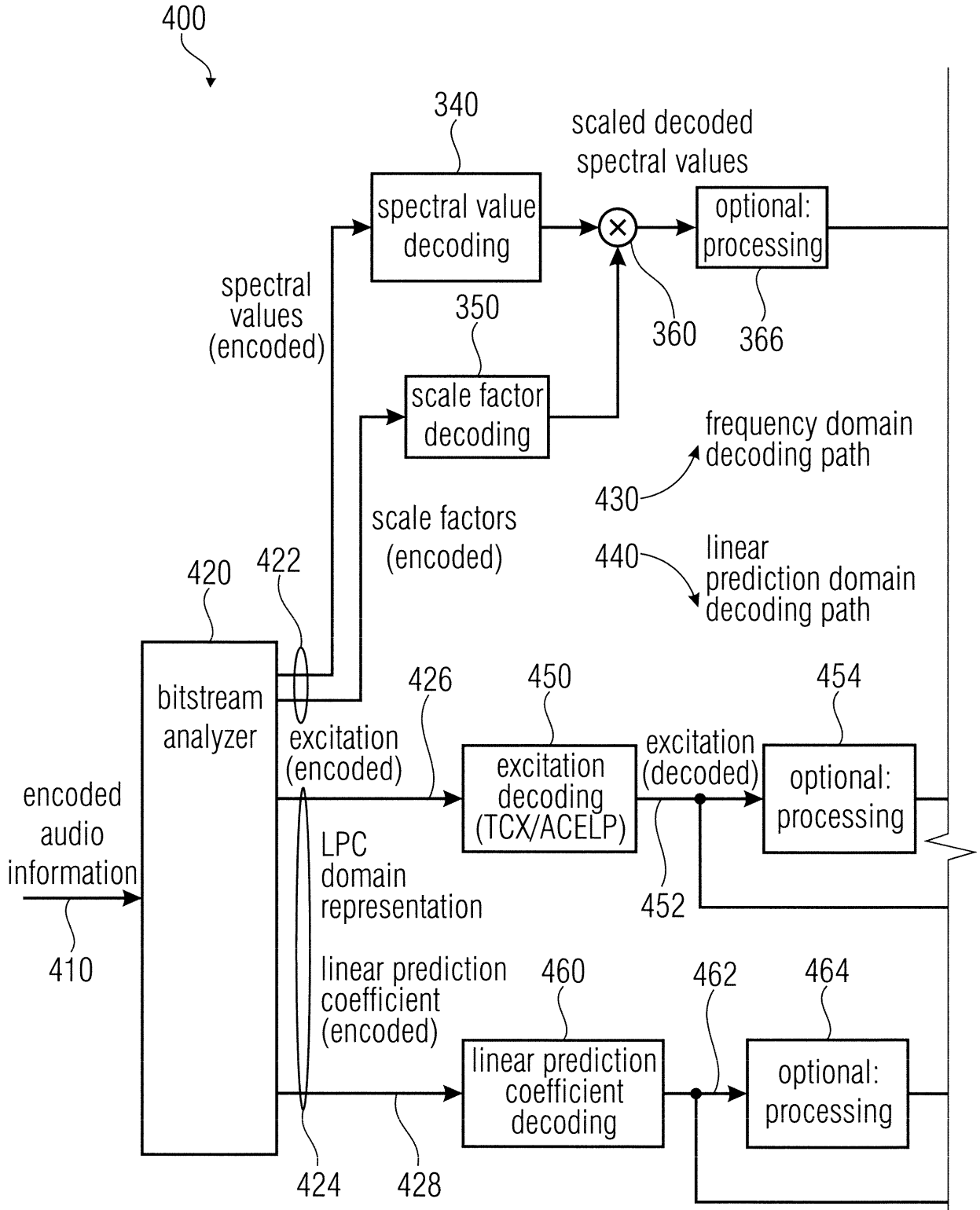


FIG 4A

FIG 4	
FIG 4A	FIG 4B

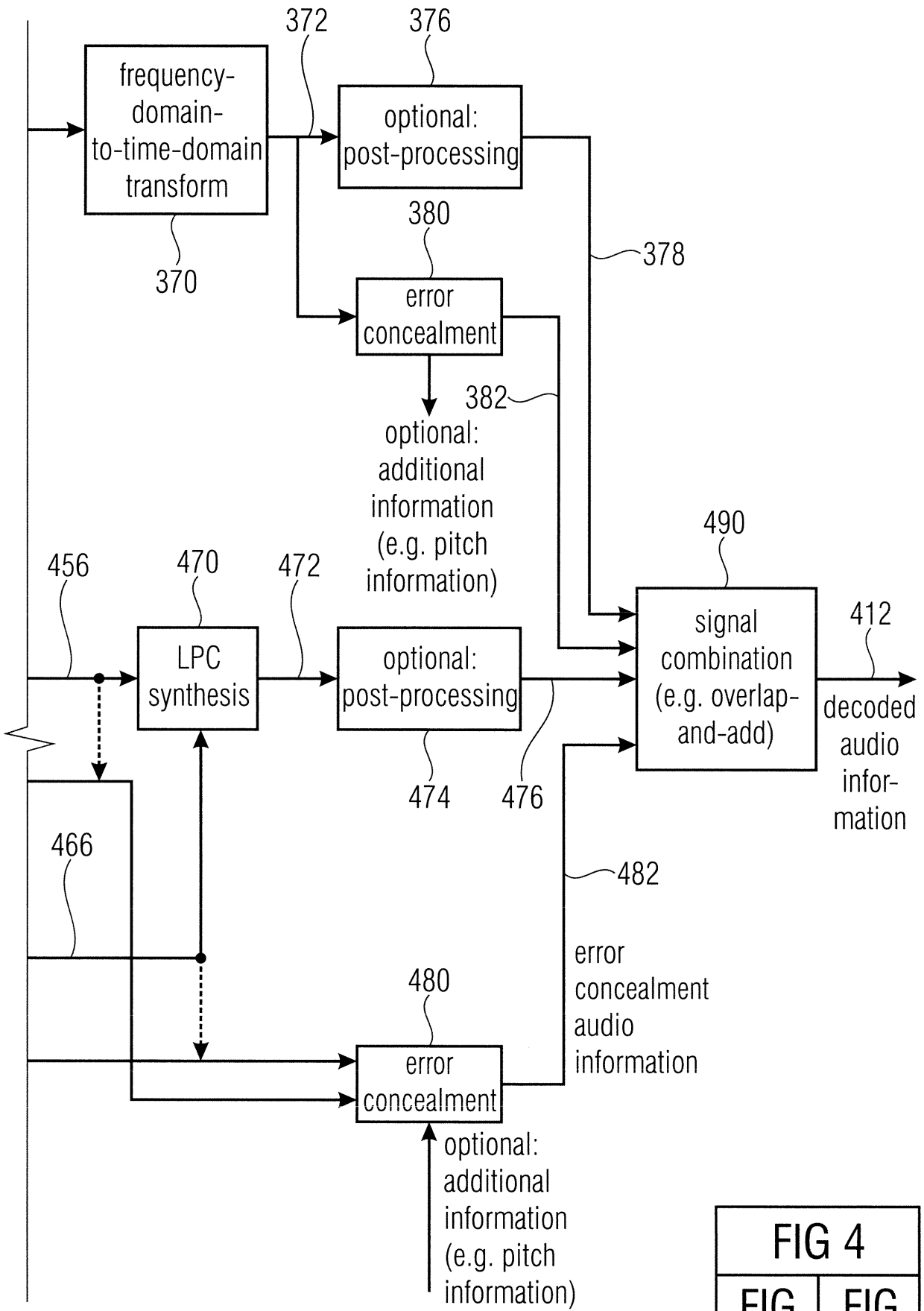
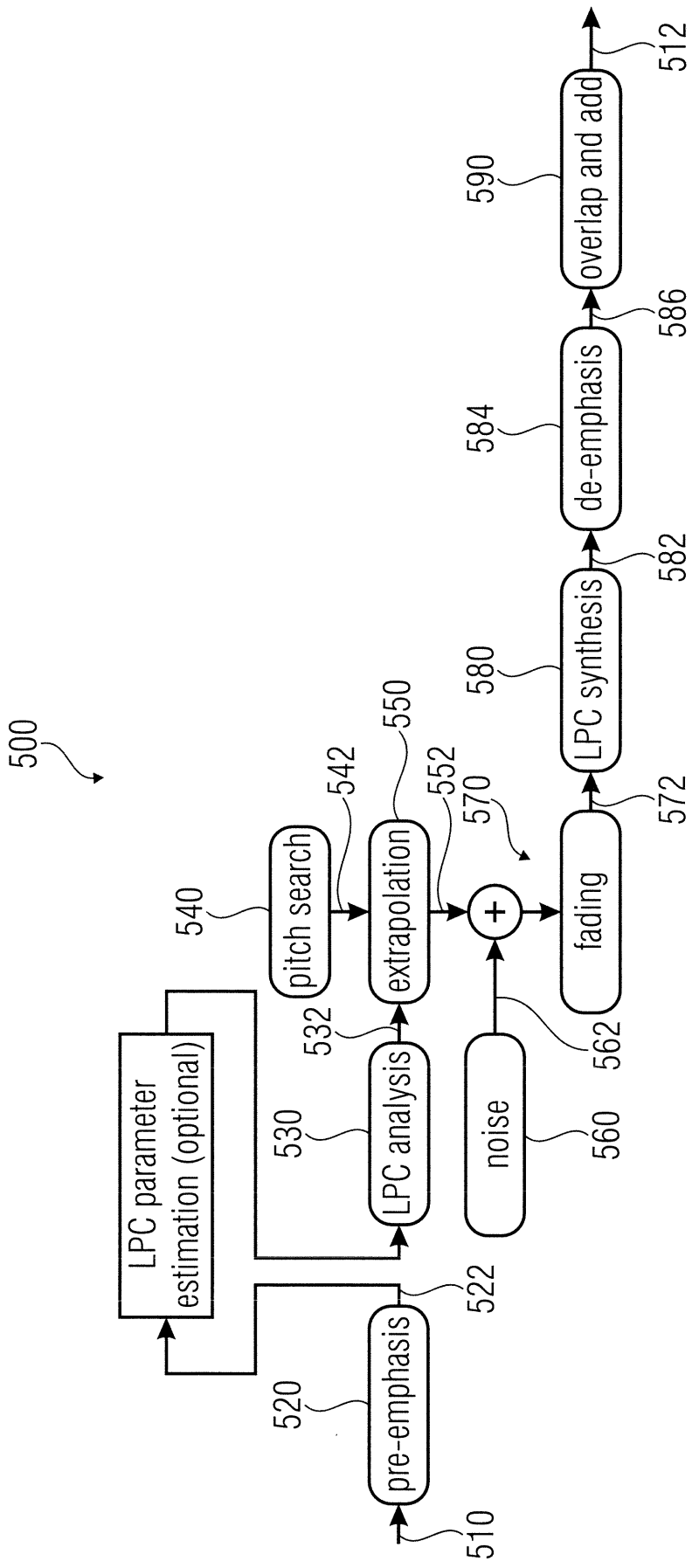


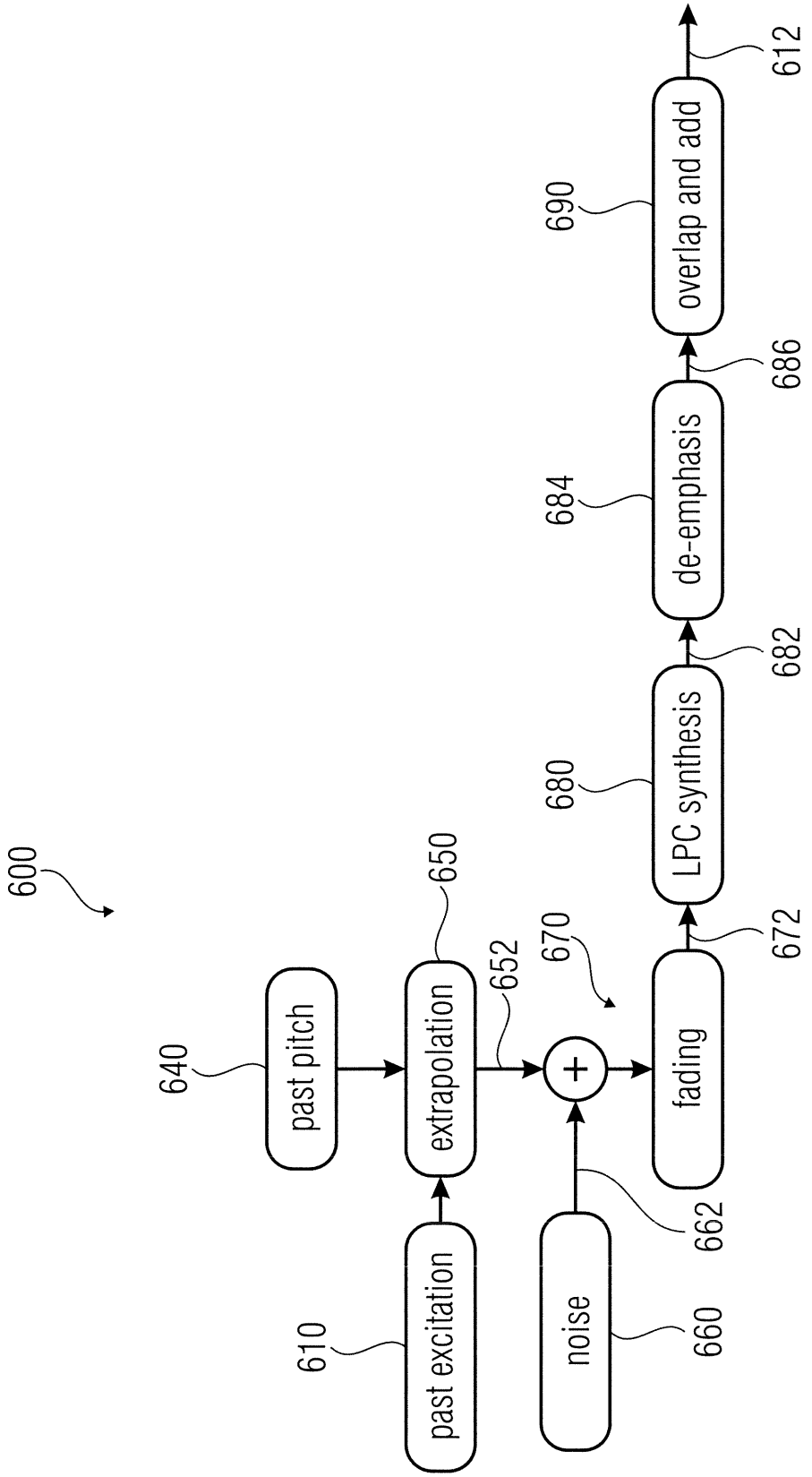
FIG 4B

FIG 4	
FIG 4A	FIG 4B



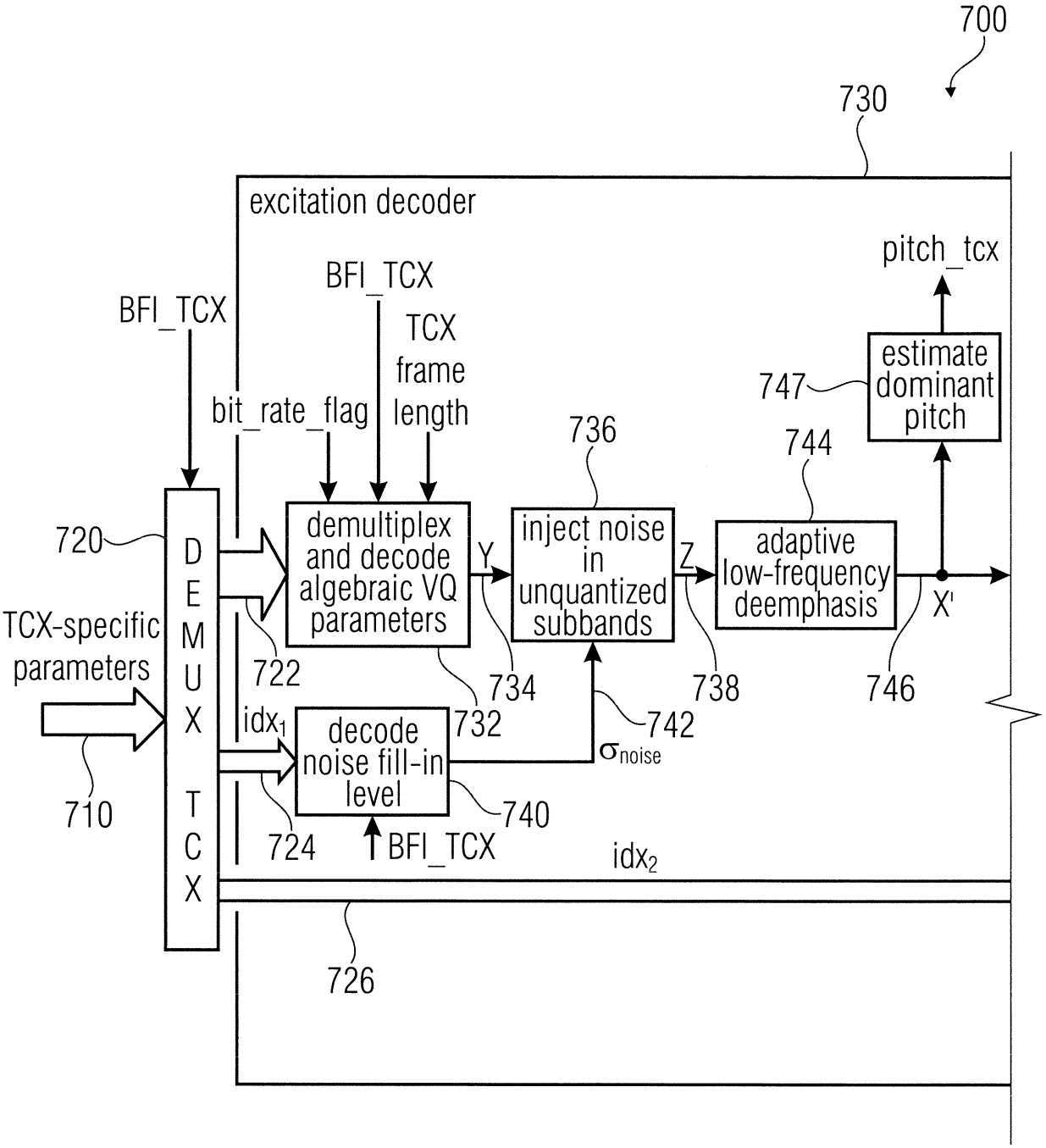
Time domain concealment overview for transform decoder

FIG 5



Time domain concealment overview for switch codec

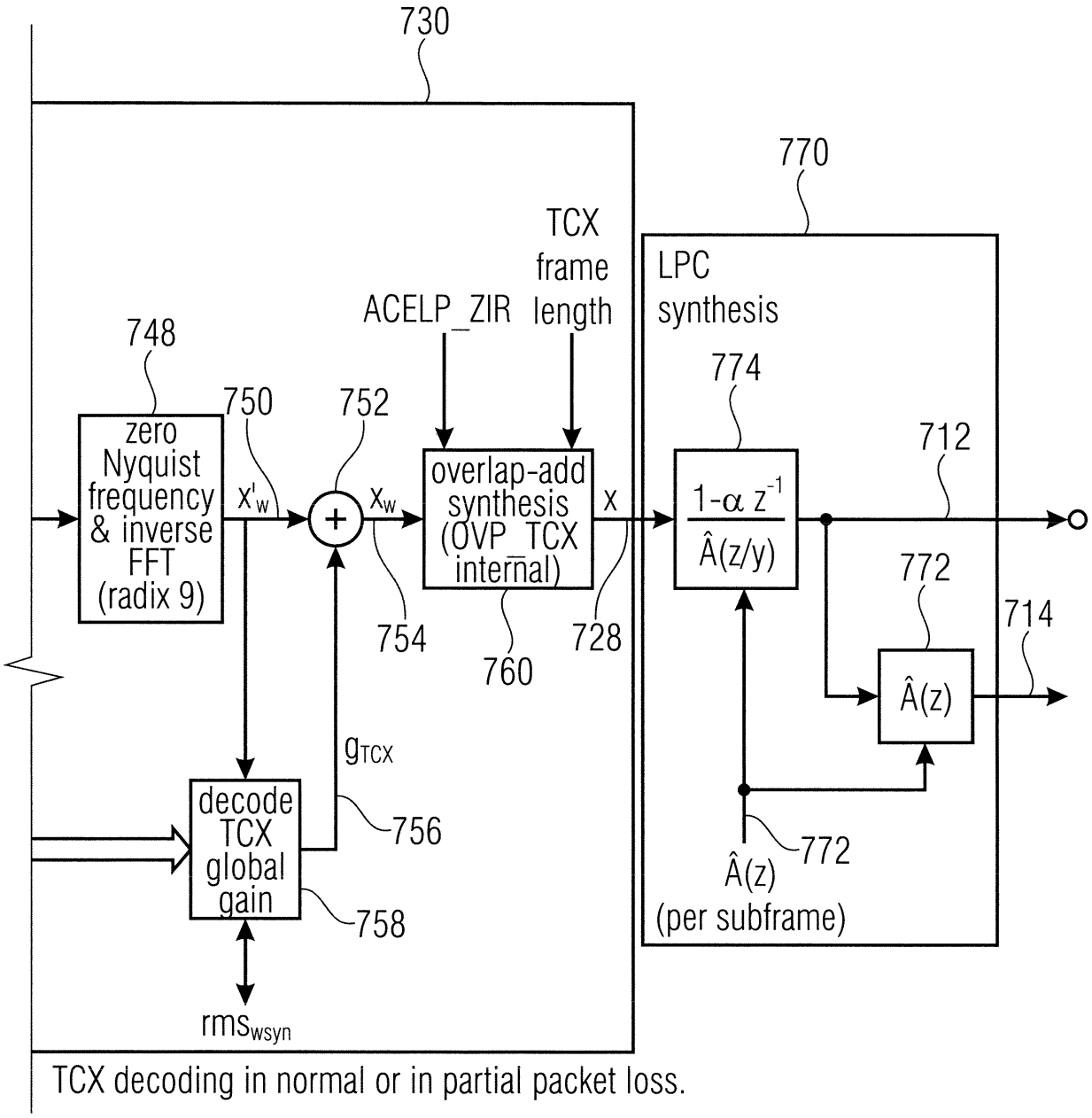
FIG6



Block diagram of the TCX decoder

FIG 7A

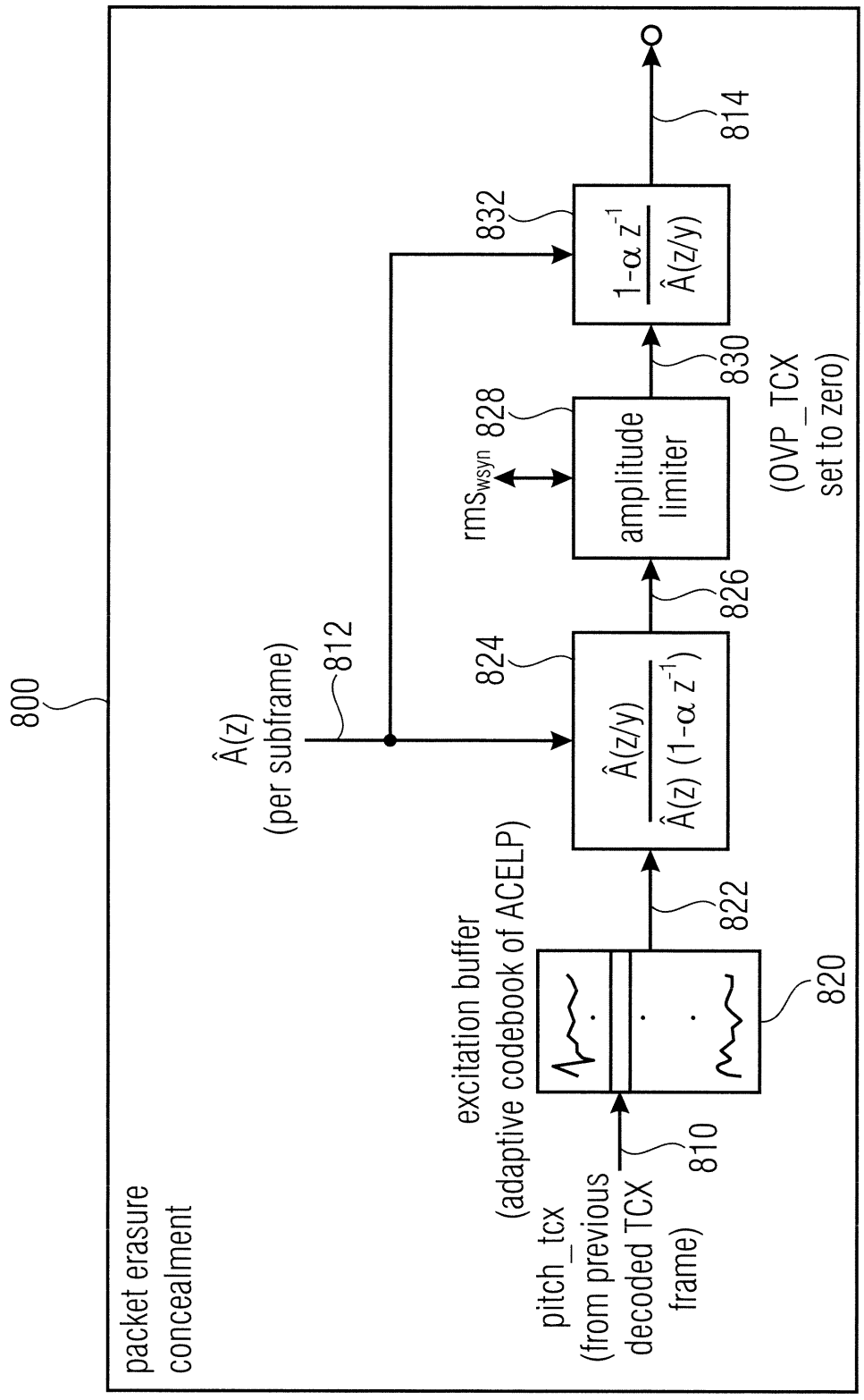
FIG 7	
FIG 7A	FIG 7B



Block diagram of the TCX decoder

FIG 7B

FIG 7	
FIG 7A	FIG 7B



Block diagram of the TCX decoder

FIG 8

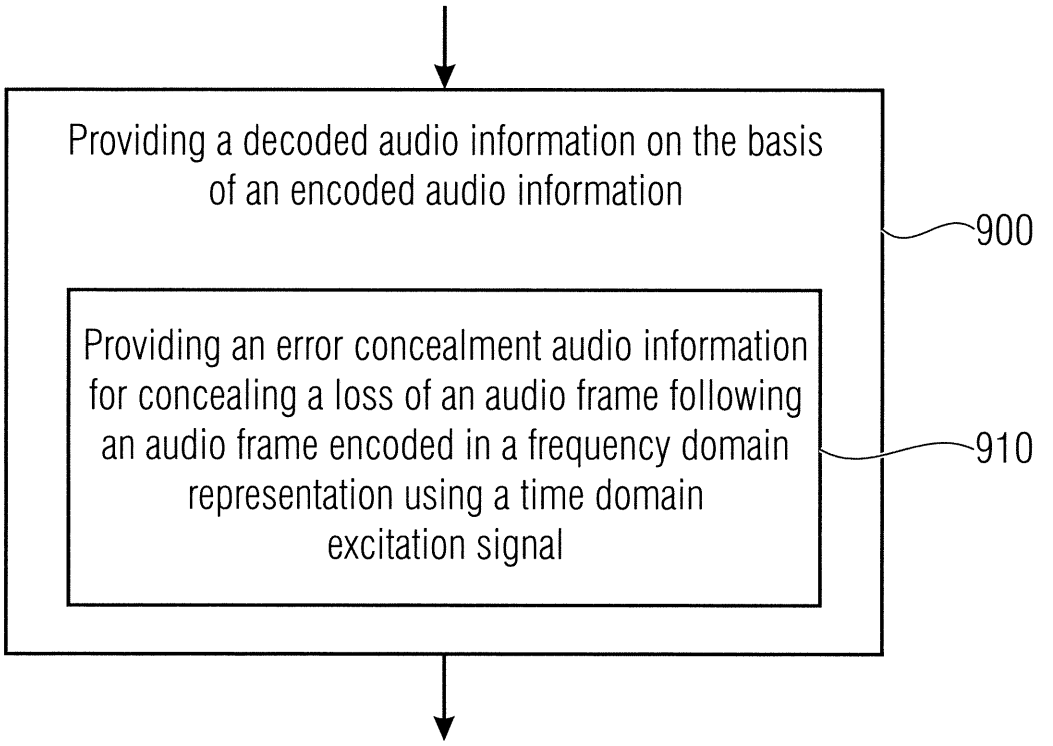

Providing a decoded audio information on the basis of an encoded audio information
900
Providing an error concealment audio information for concealing a loss of an audio frame following an audio frame encoded in a frequency domain representation using a time domain excitation signal
910

FIG 9

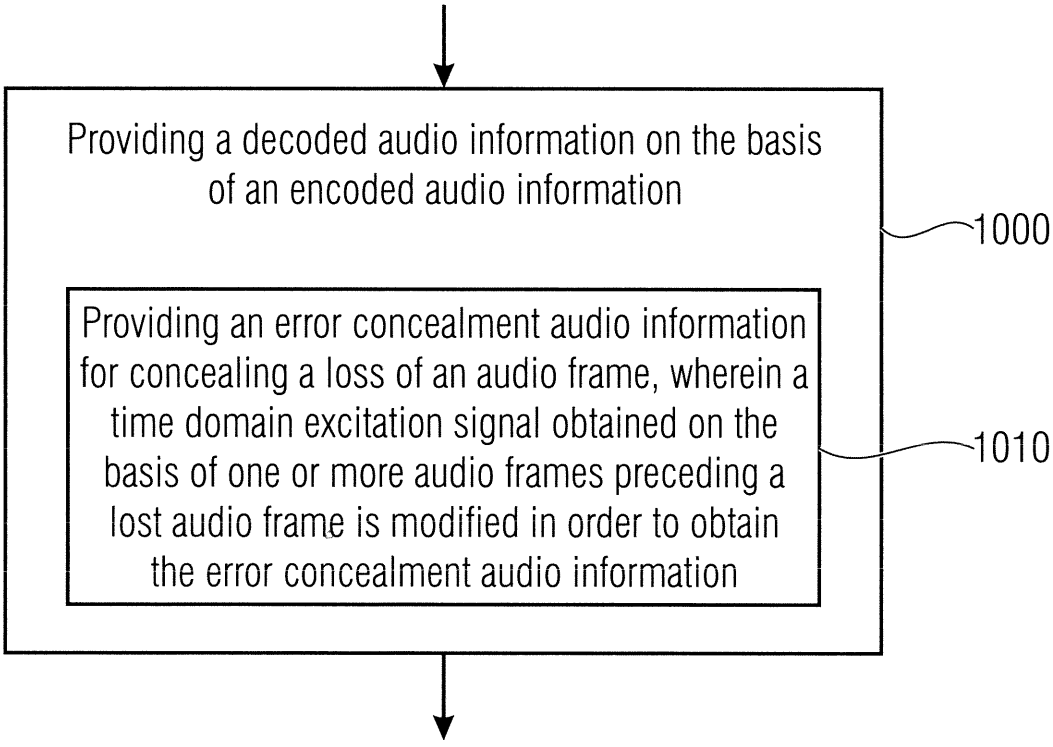

Providing a decoded audio information on the basis of an encoded audio information
1000
Providing an error concealment audio information for concealing a loss of an audio frame, wherein a time domain excitation signal obtained on the basis of one or more audio frames preceding a lost audio frame is modified in order to obtain the error concealment audio information
1010

FIG 10

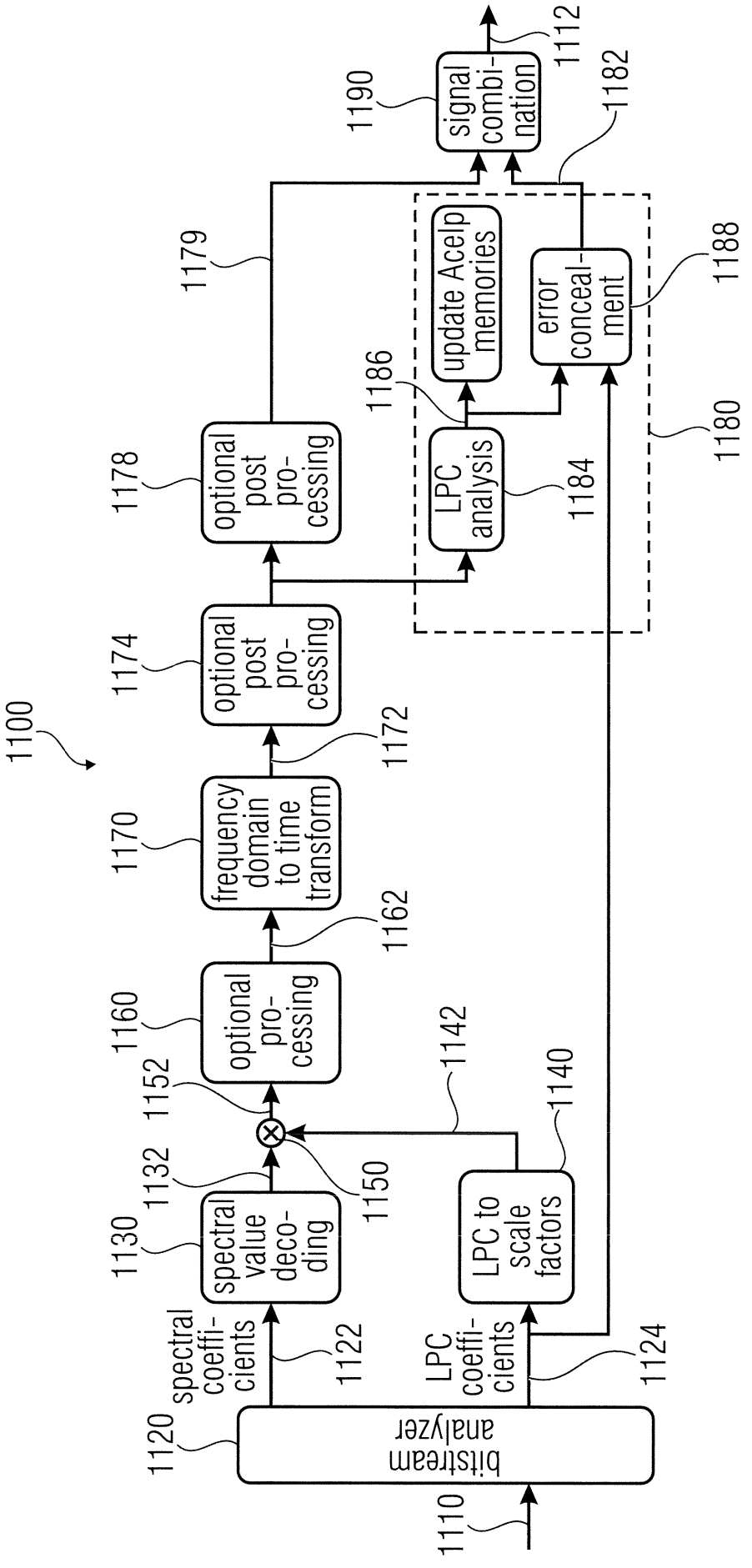

1100
1110
bitstream analyzer
1120
spectral coeffi-cients
1122
LPC coeffi-cients
1124
spectral value deco-ding
1130
1132
LPC to scale factors
1140
1142
1150
optional pro-cessing
1152
1160
frequency domain to time transform
1162
1170
optional post pro-cessing
1172
1174
optional post pro-cessing
1178
1179
LPC analysis
1184
1186
update AceIp memories
1180
error conceal-ment
1188
1182
signal combi-nation
1190
1112

FIG 11