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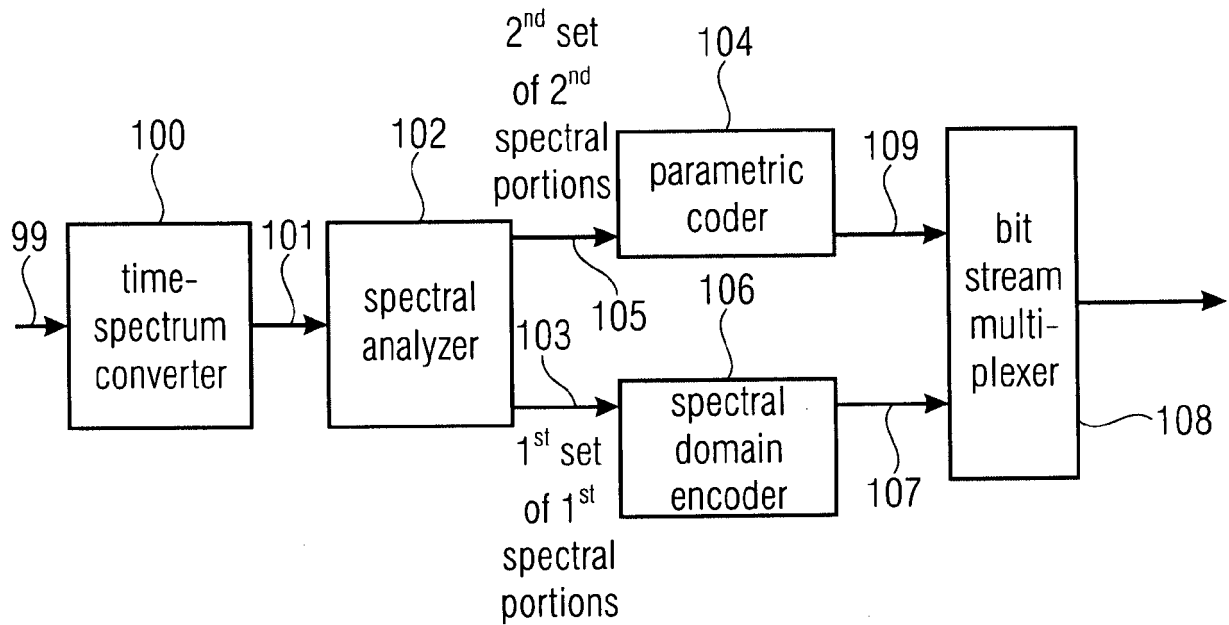


FIG 1A

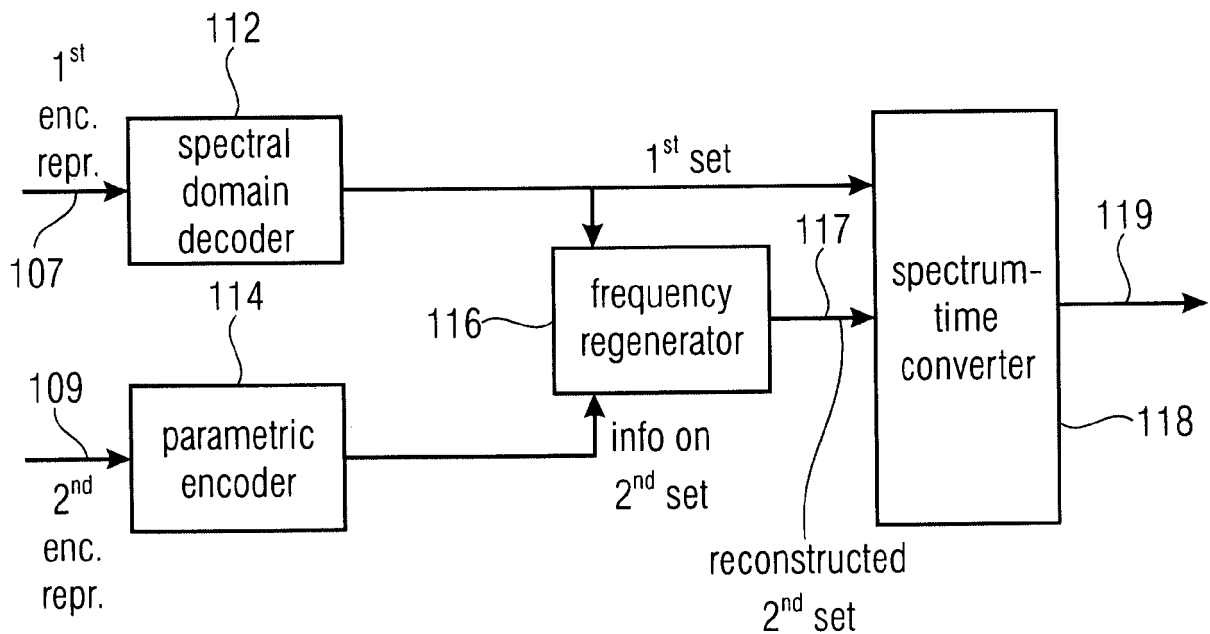


FIG 1B

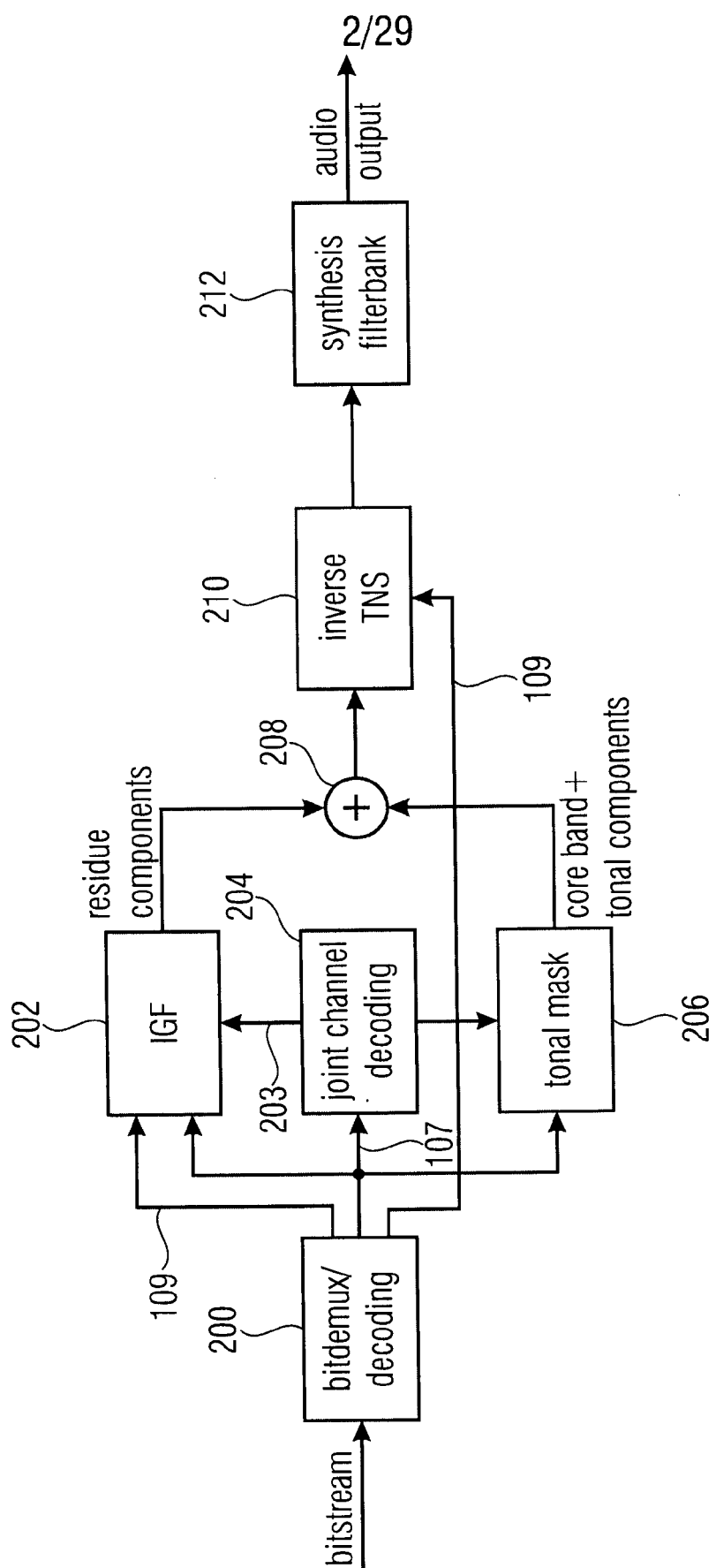


FIG 2A

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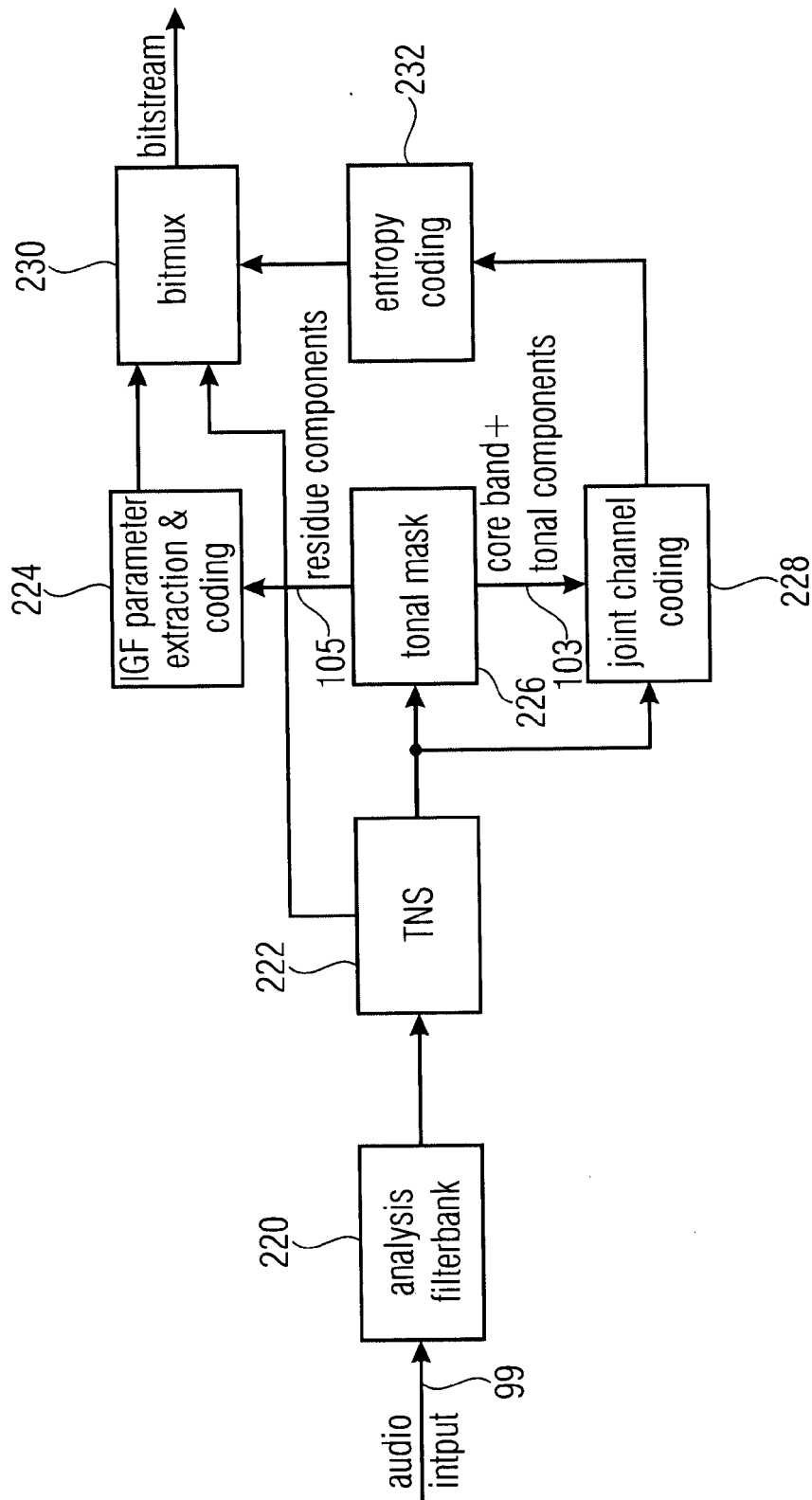


FIG 2B

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- 1st resolution (high resolution) for „envelope“ of the 1st set (line-wise coding);
- 2nd resolution (low resolution) for „envelope“ of the 2nd set (scale factor per SCB);

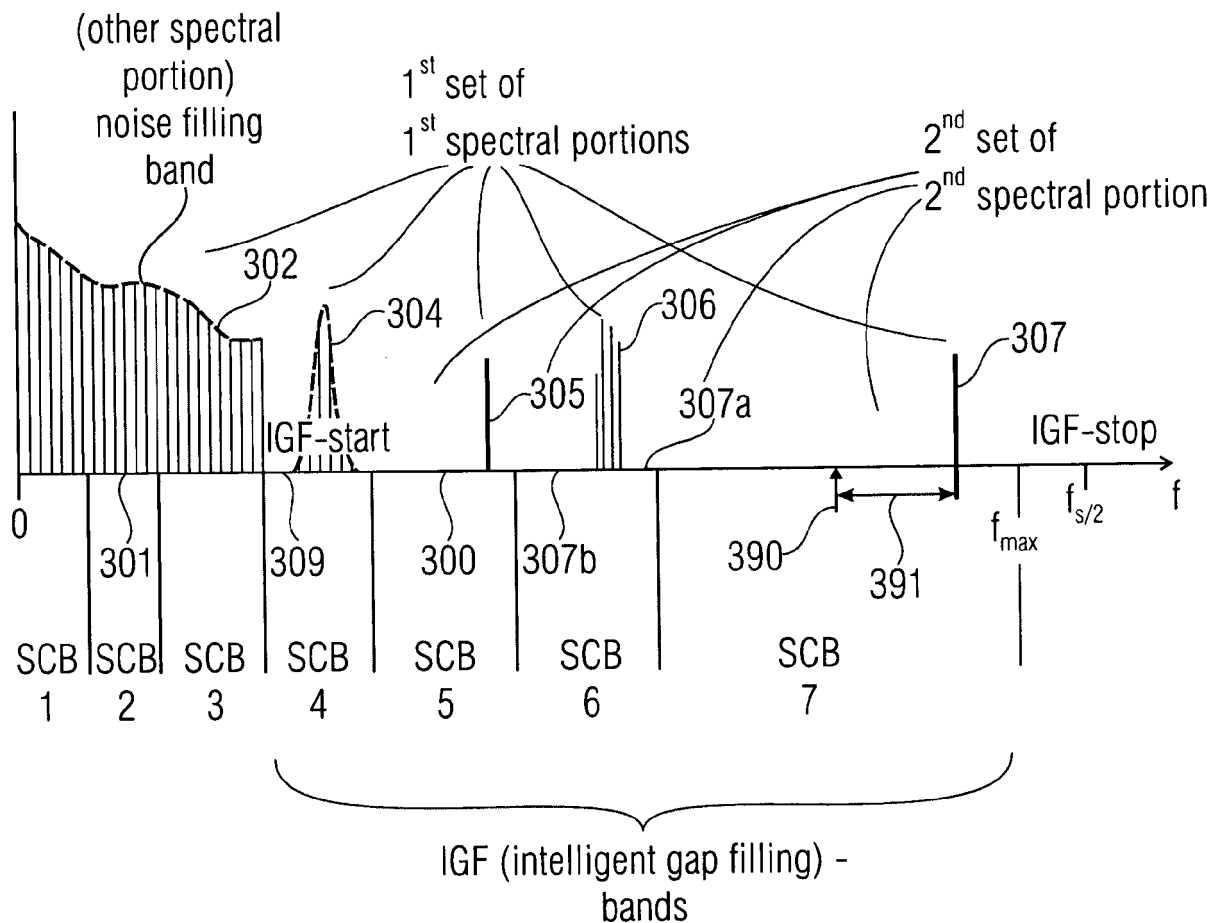


FIG 3A

SCB1	SCB2	SCB3	SCB4	SCB5	SCB6	SCB7
SF1	SF2	SF3	SF4	SF5	SF6	SF7
			E ₁	E ₂	E ₃	E ₄
	NF ₂					

308

310

312

FIG 3B

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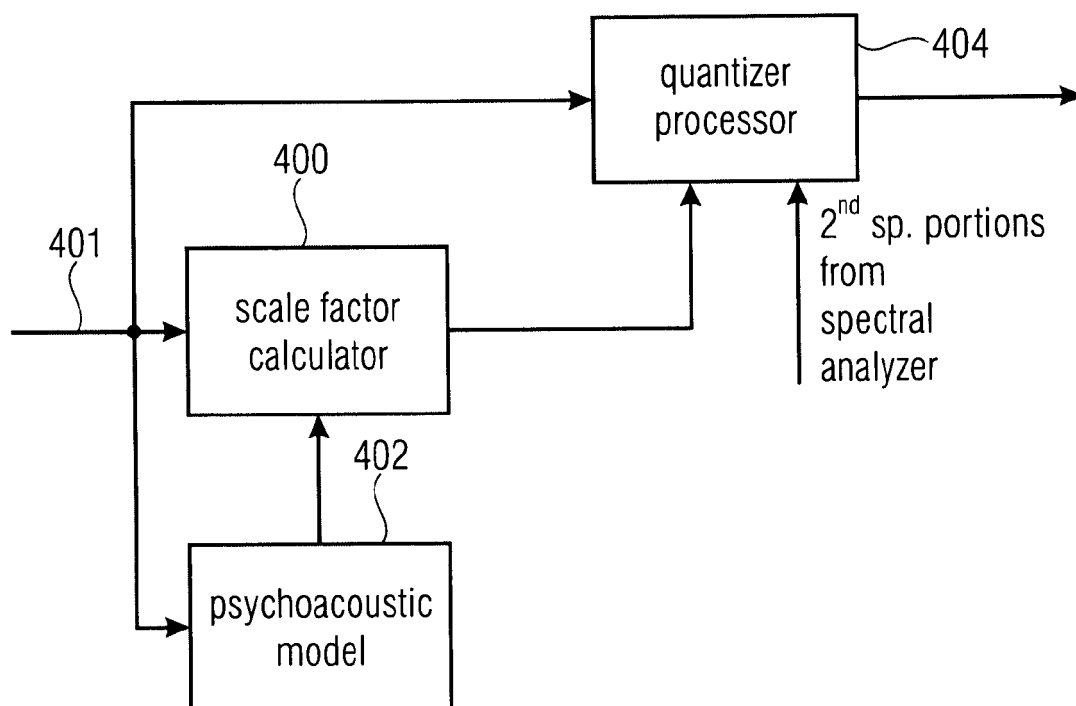


FIG 4A

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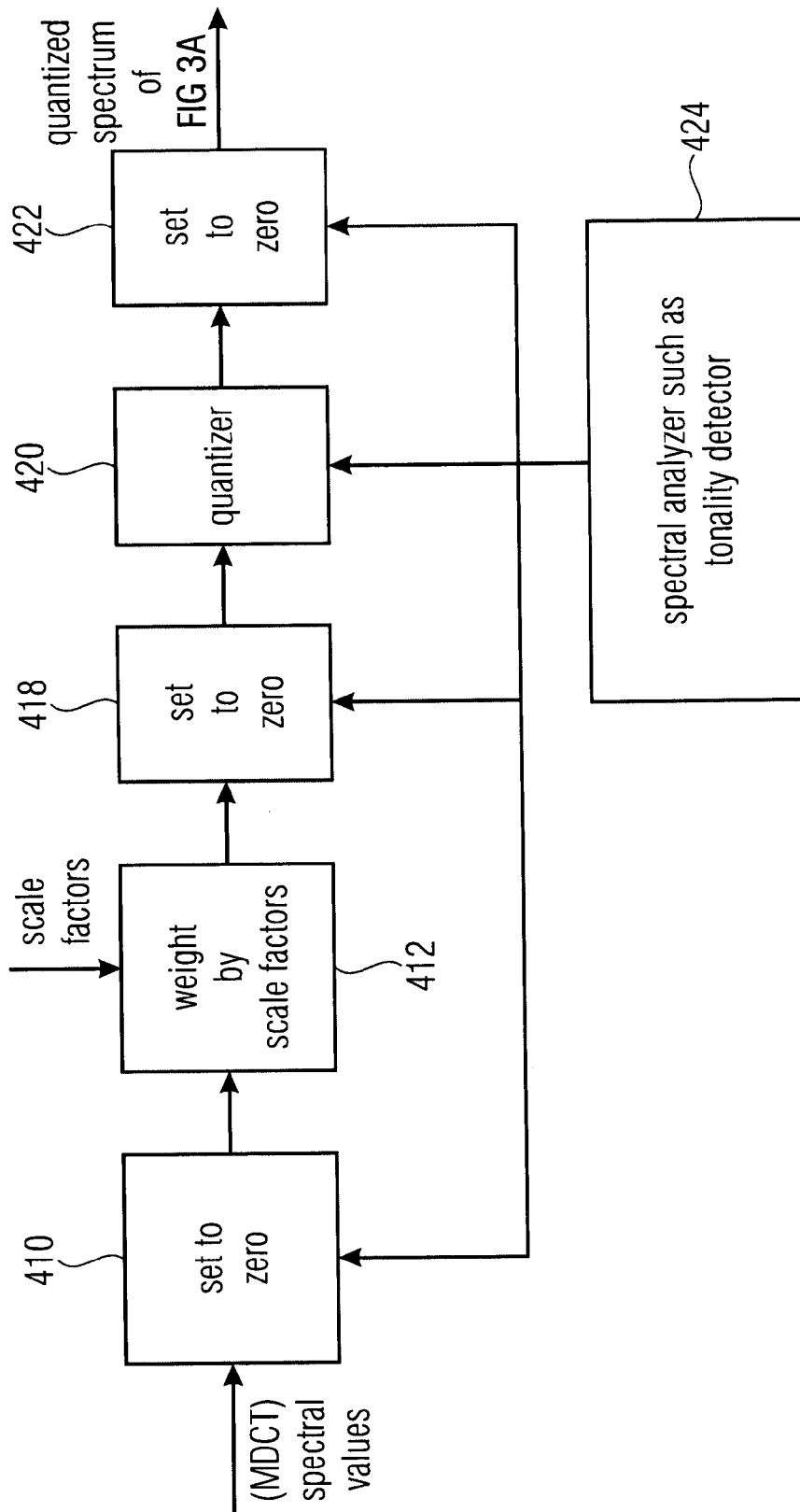


FIG 4B
(QUANTIZER PROCESSOR)

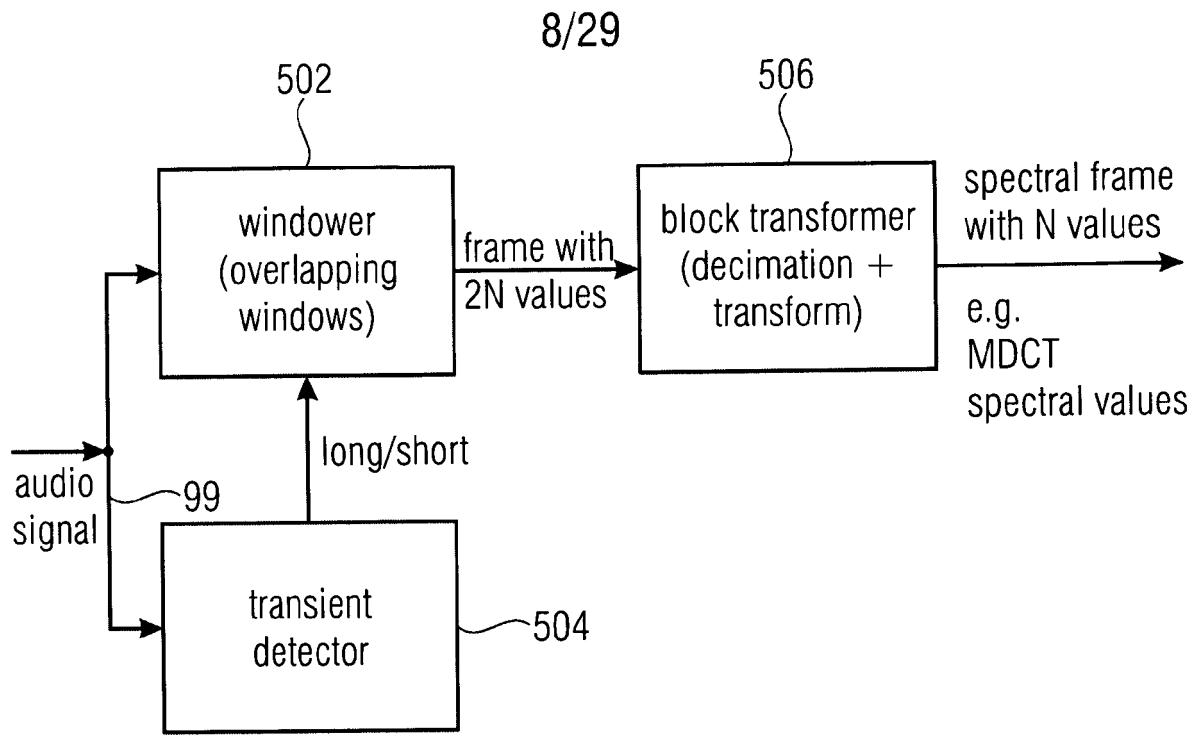


FIG 5A
(OTHER SPECTRAL PORTIONS)

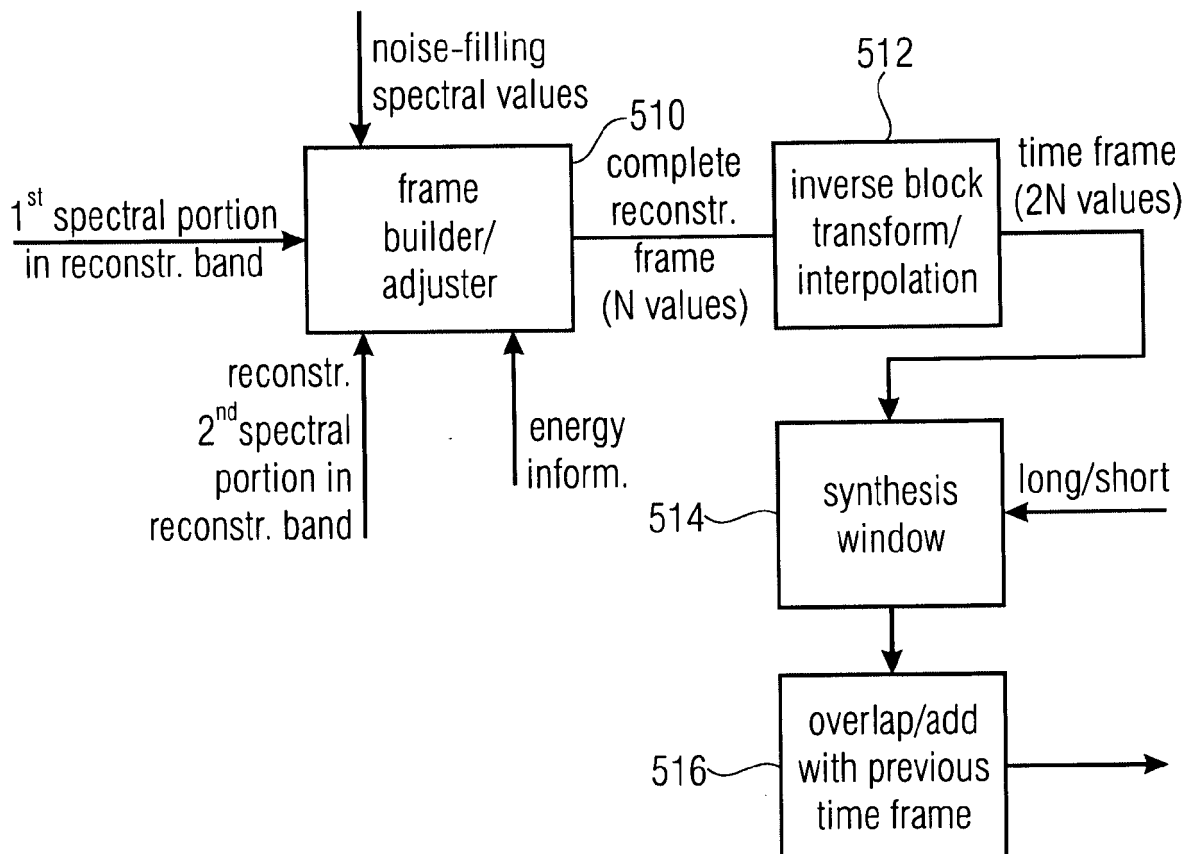


FIG 5B

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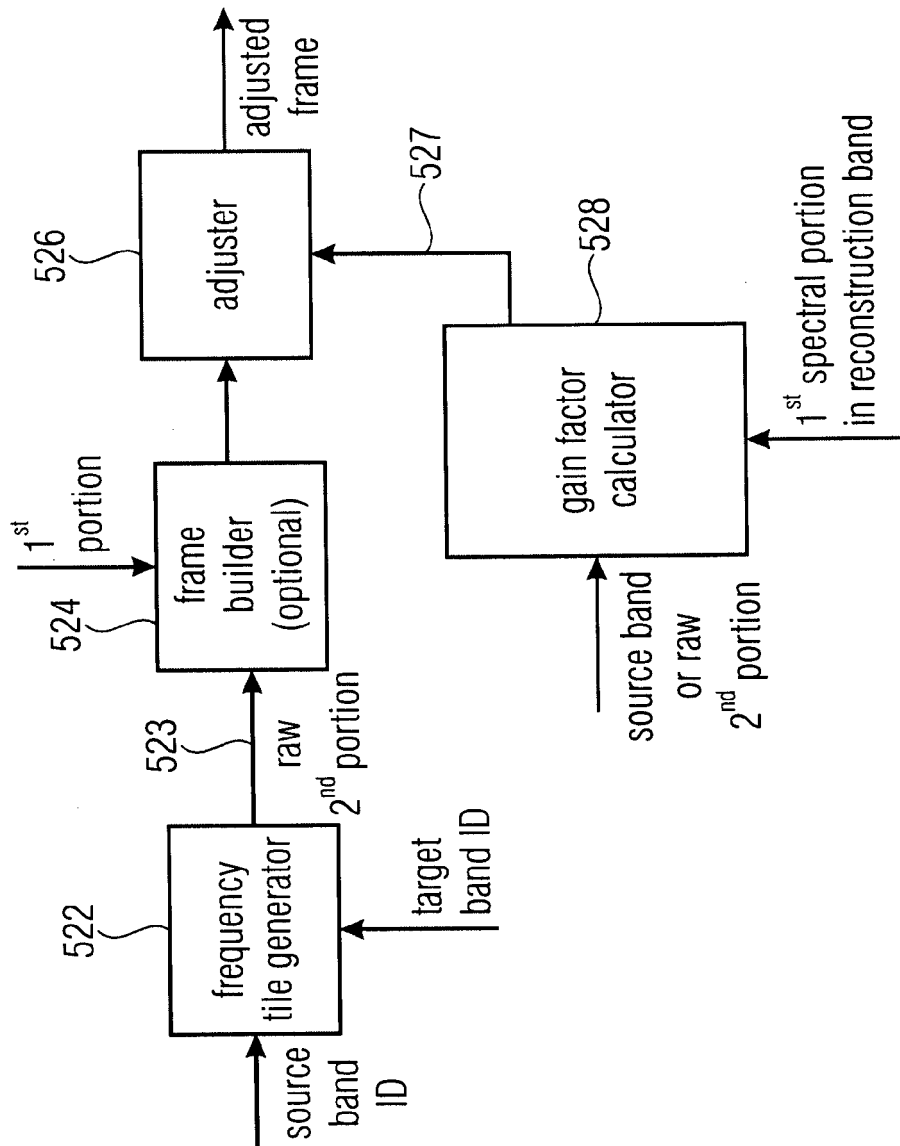


FIG 5C

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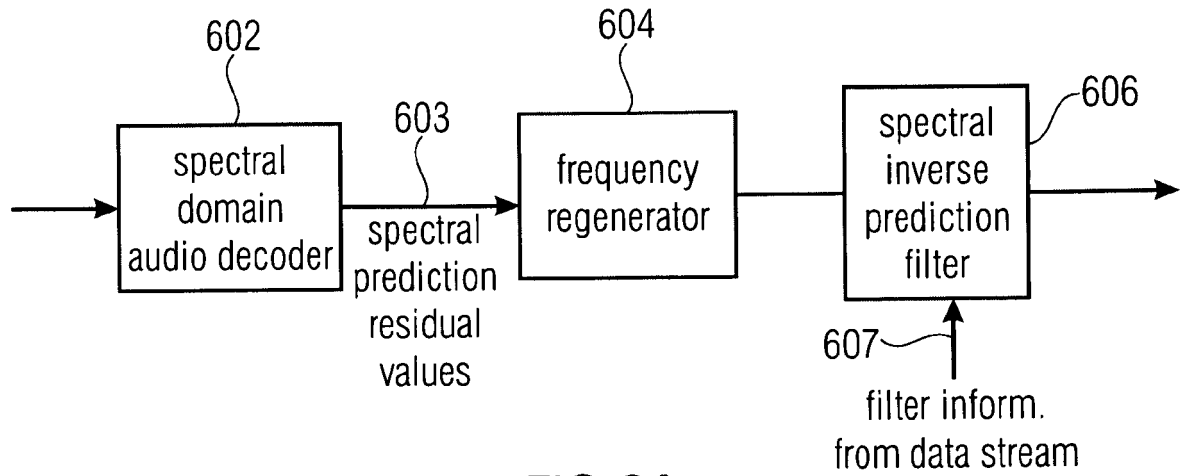


FIG 6A

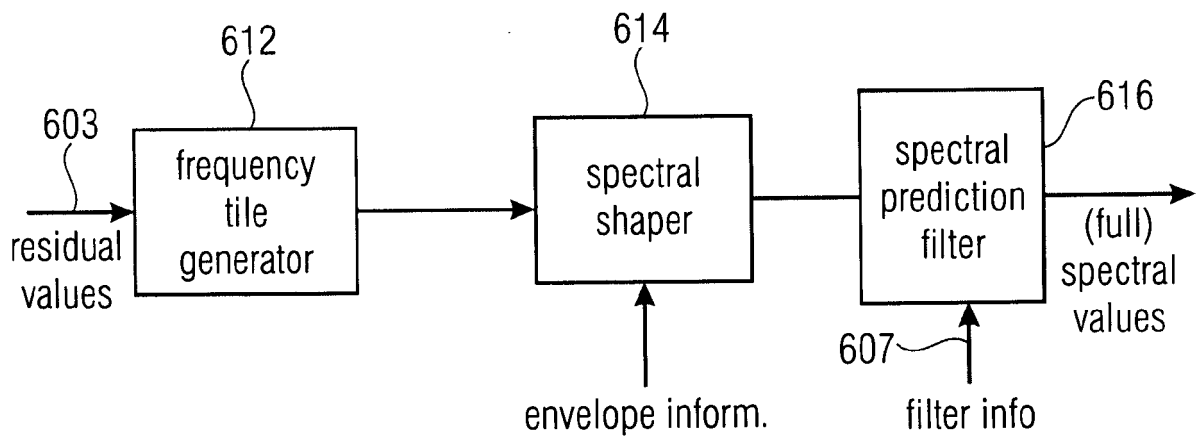


FIG 6B

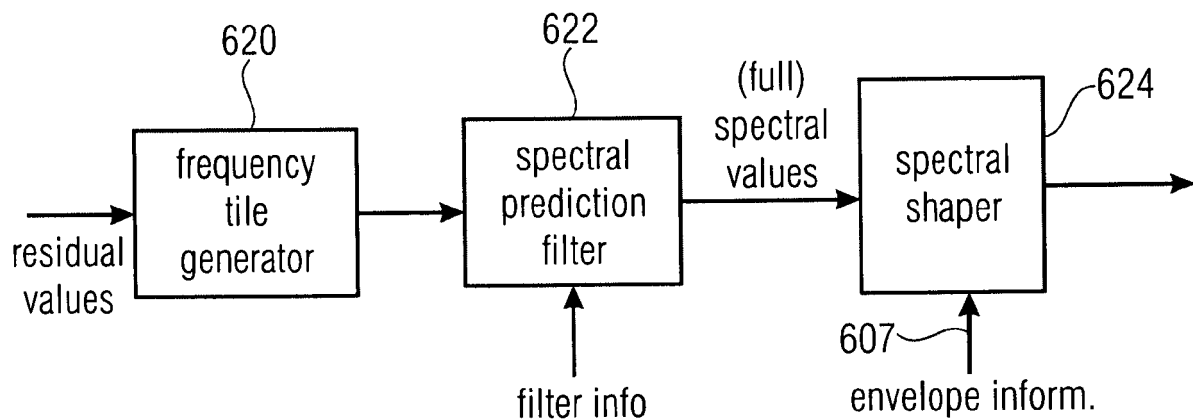


FIG 6C

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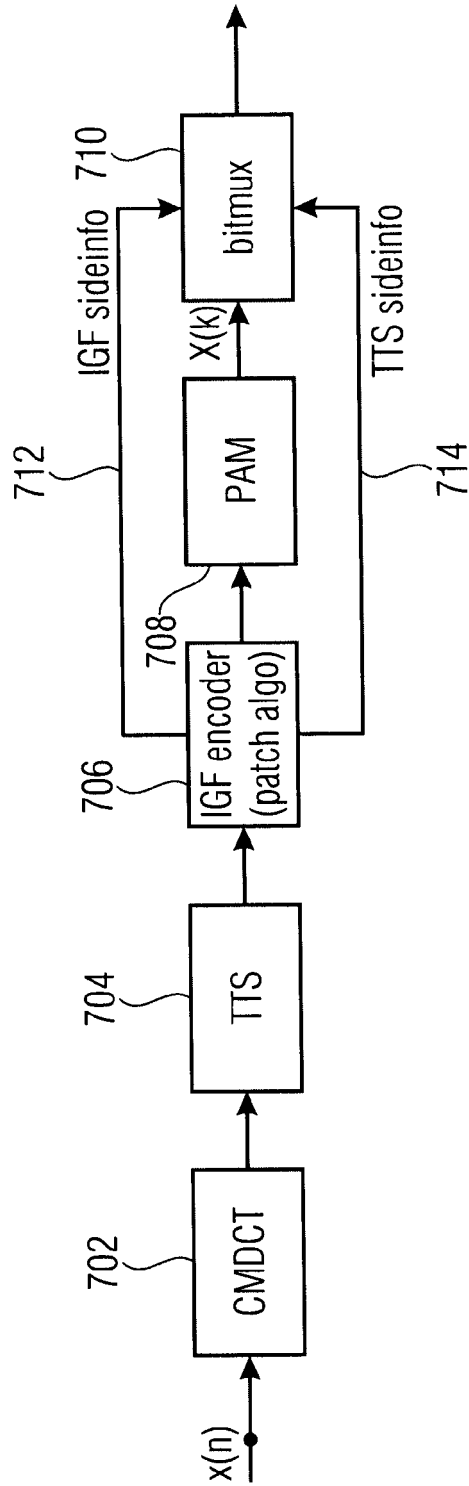


FIG 7A
(ENCODER)

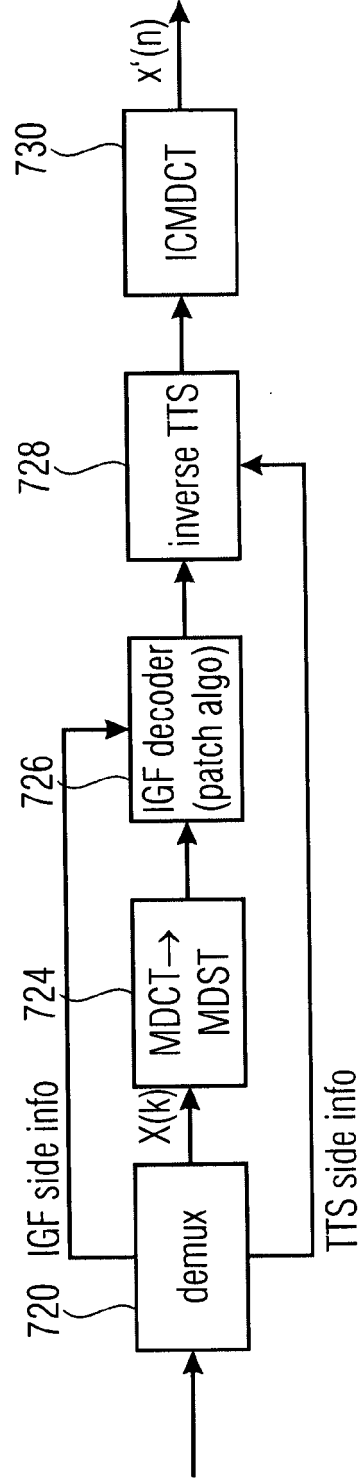
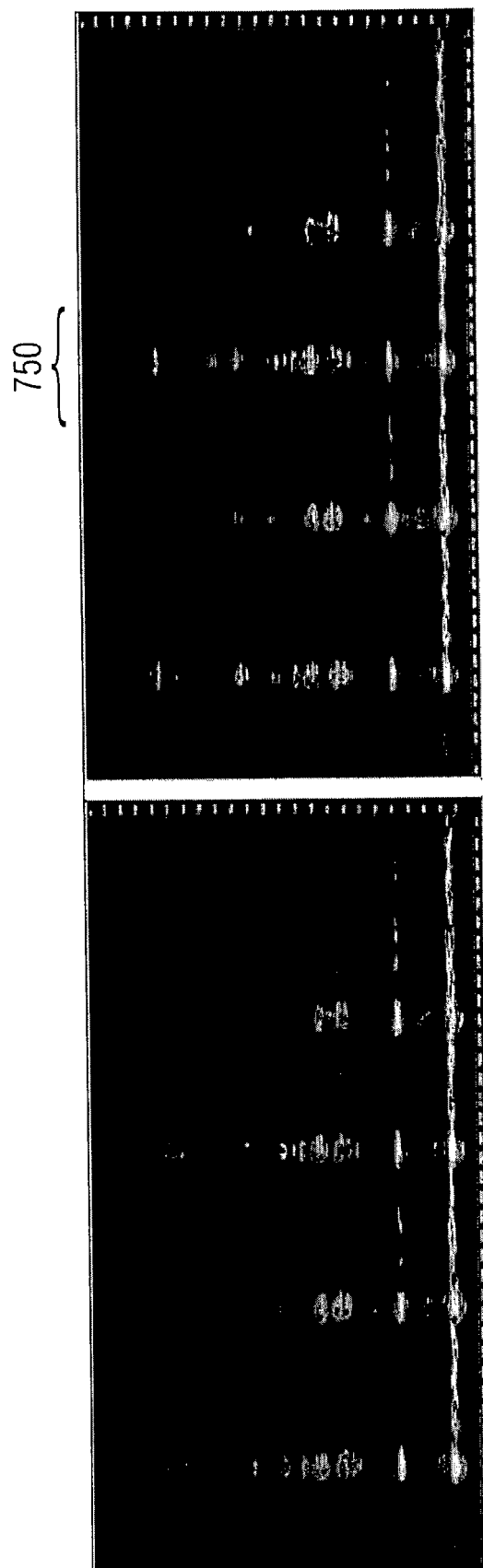


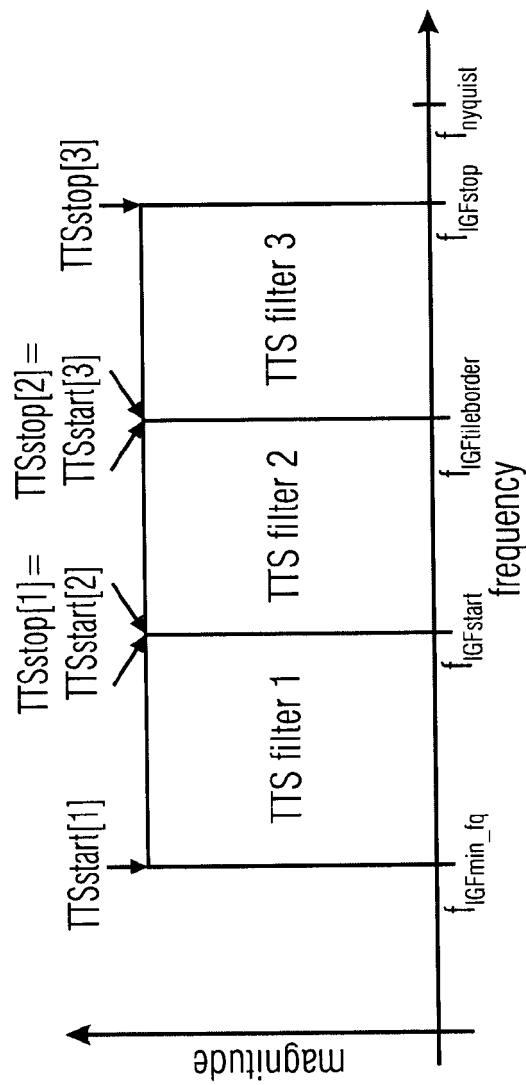
FIG 7B
(DECODER)

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DFT spectrogram of the original signal (left panel);
DFT spectrogram of the extended signal without TTS (right panel).

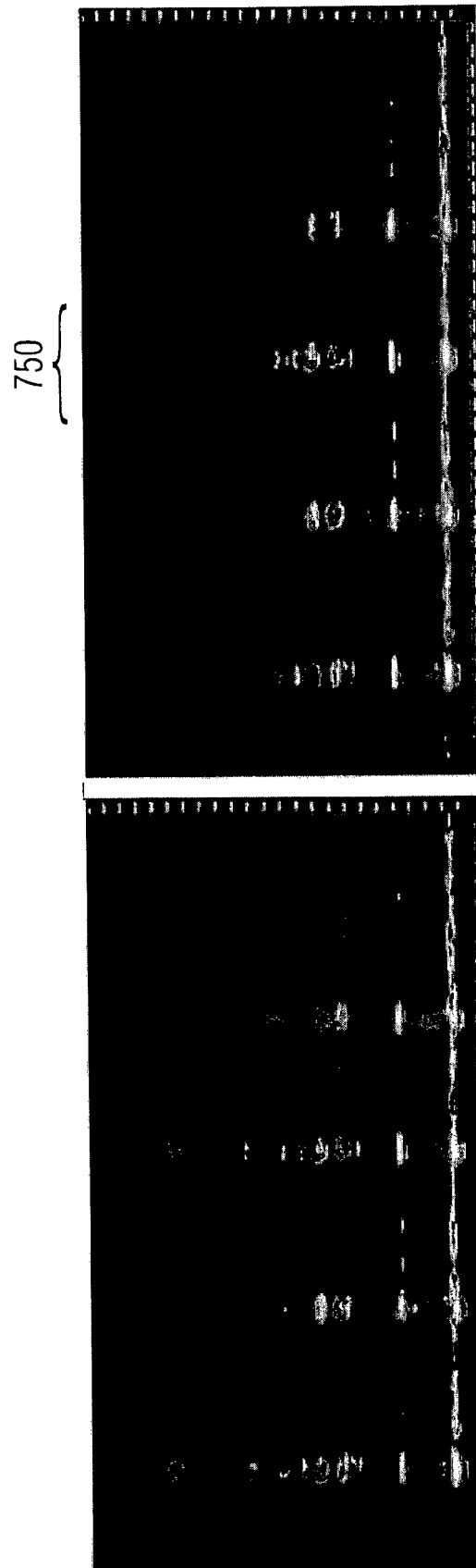
FIG 7C



Basis TTS filter scheme. Each box marks the spectral region covered by one particular filter.

FIG 7D

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DFT spectrogram of the original signal (left panel);
DFT spectrogram of the extended signal with TTS (right panel).

FIG 7E

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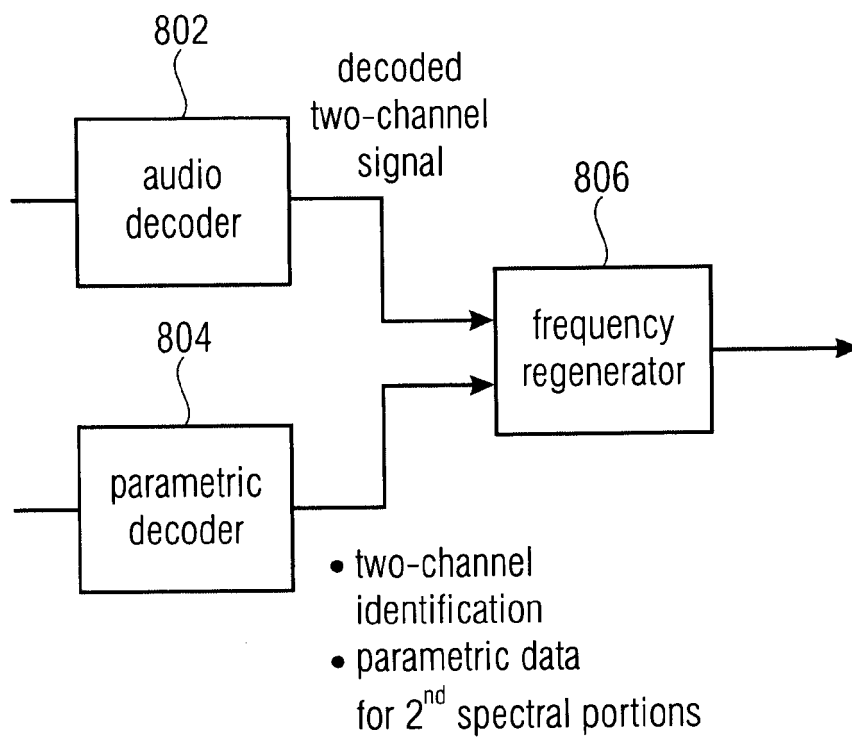


FIG 8A

source range	1	1	2	2
destin. range	1	2	1	2

1: first two-channel representation (e.g. L/R)

2: second two-channel representation (e.g. M/S)

FIG 8B

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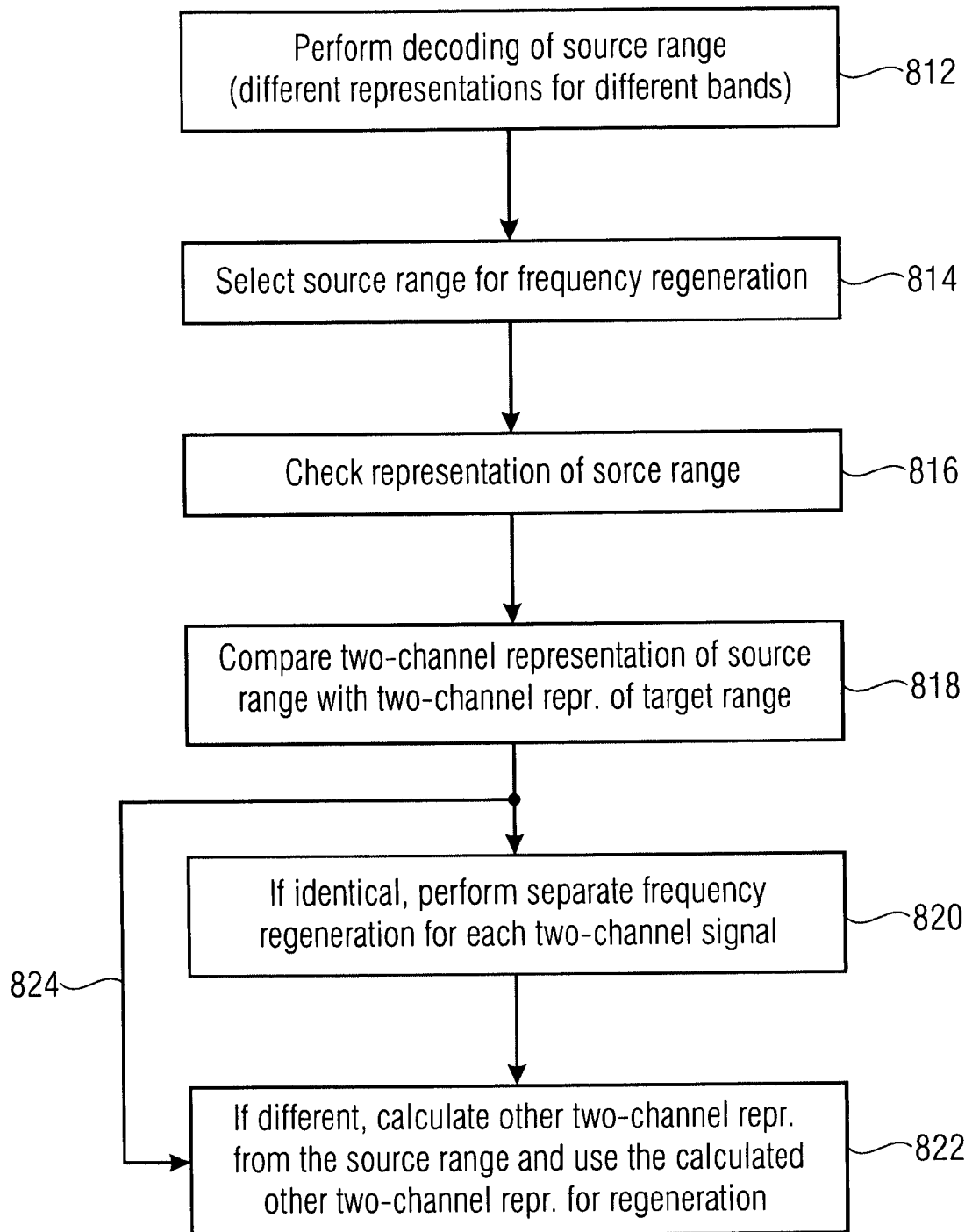


FIG 8C

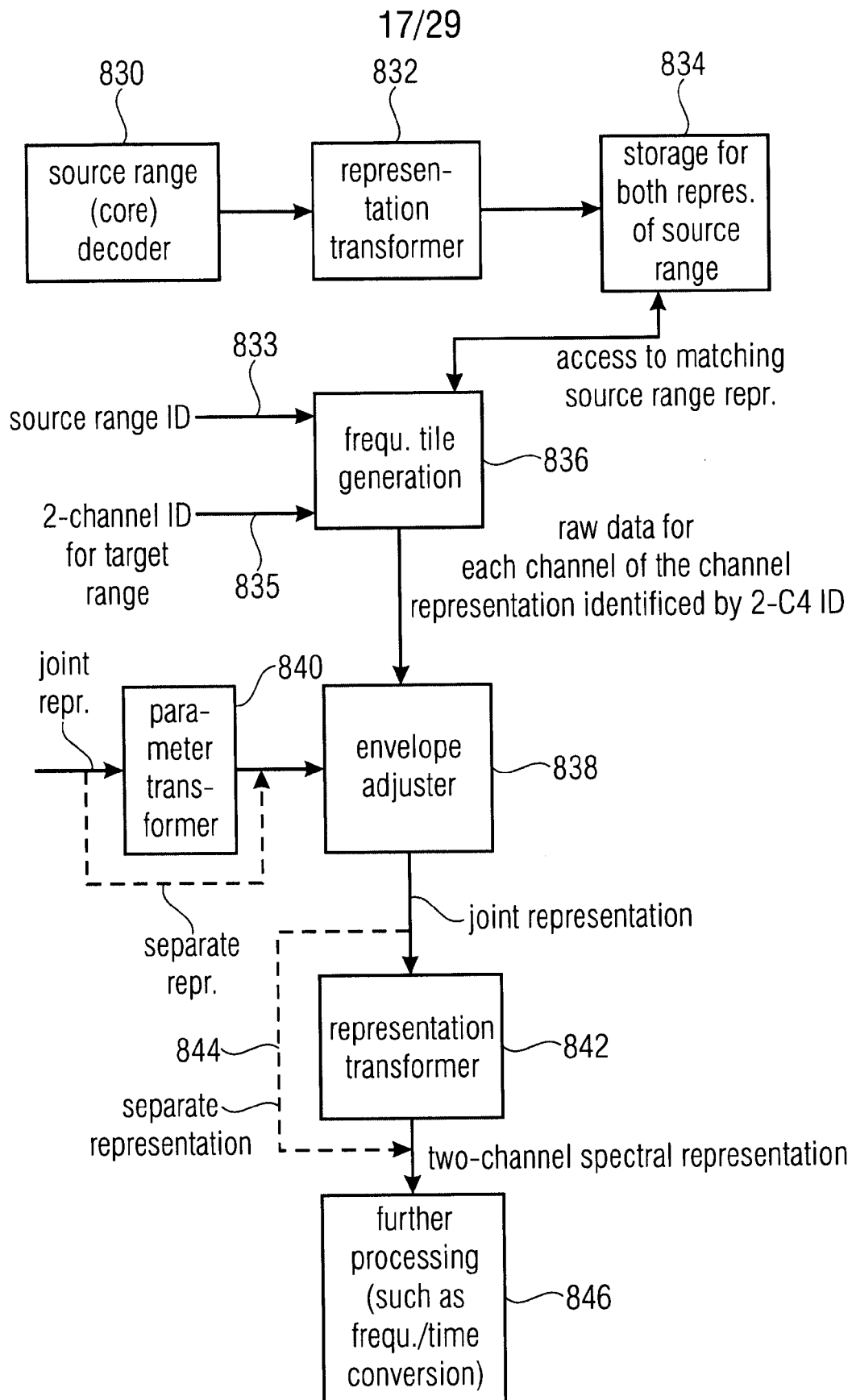


FIG 8D

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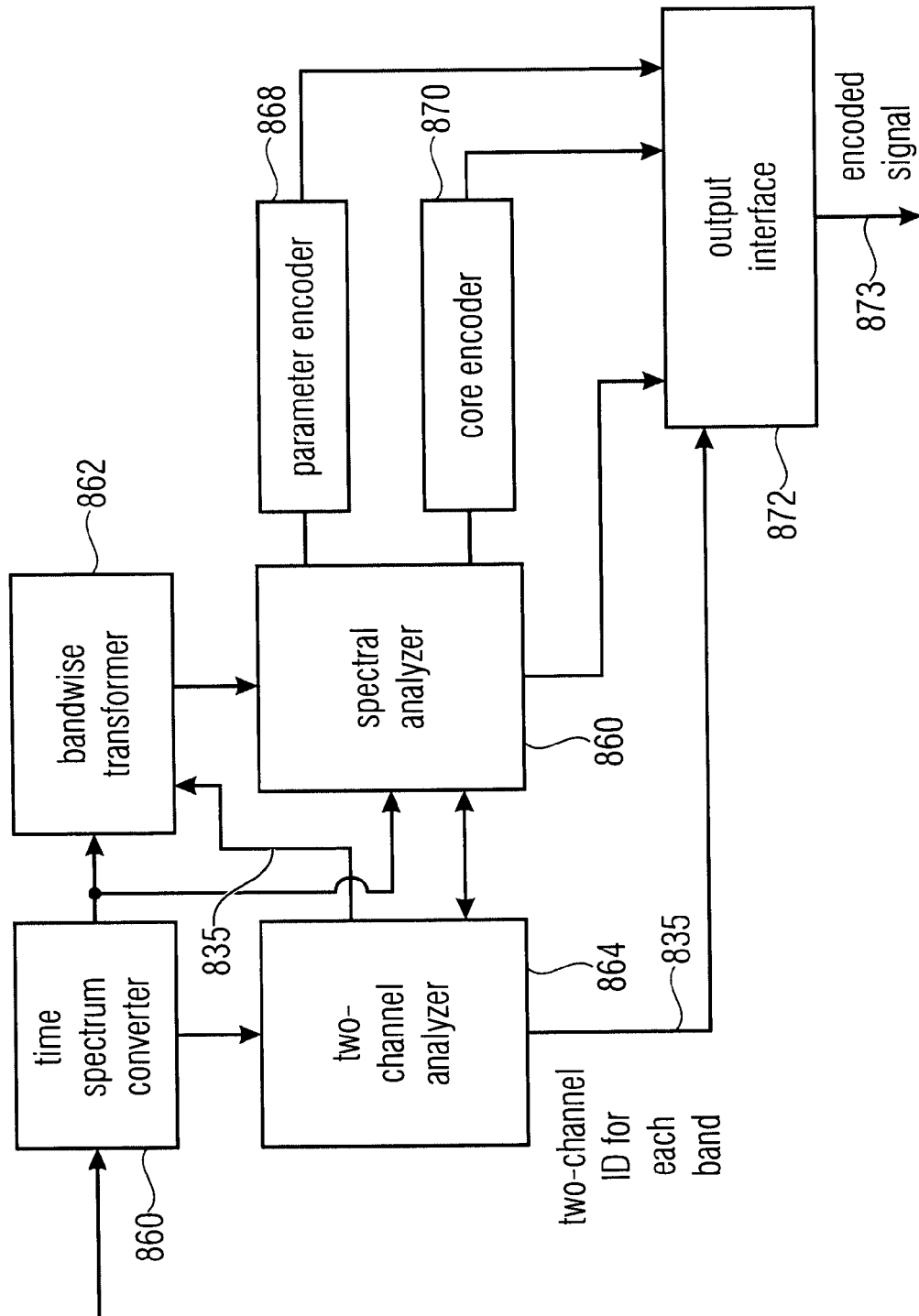


FIG 8E

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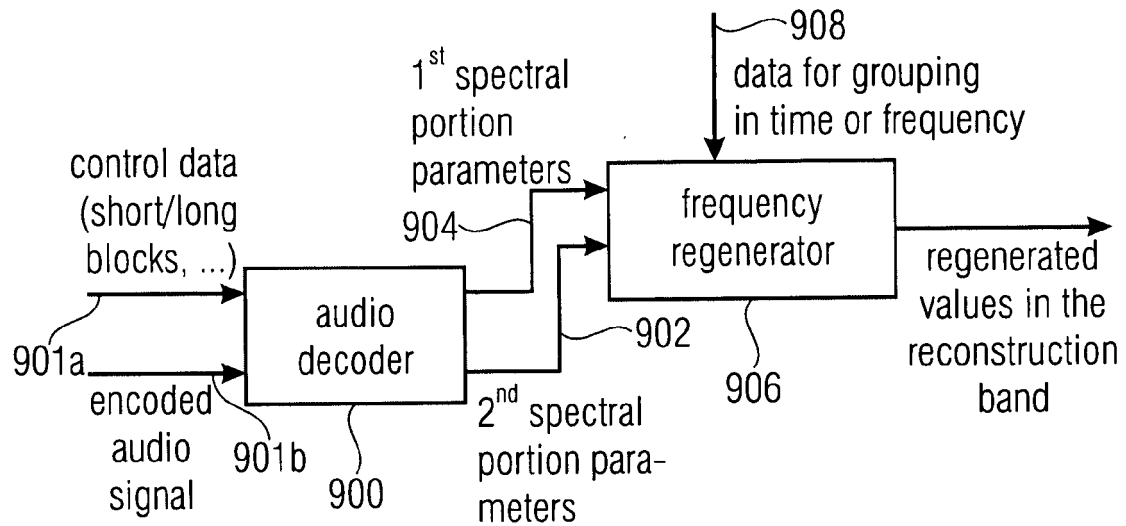


FIG 9A

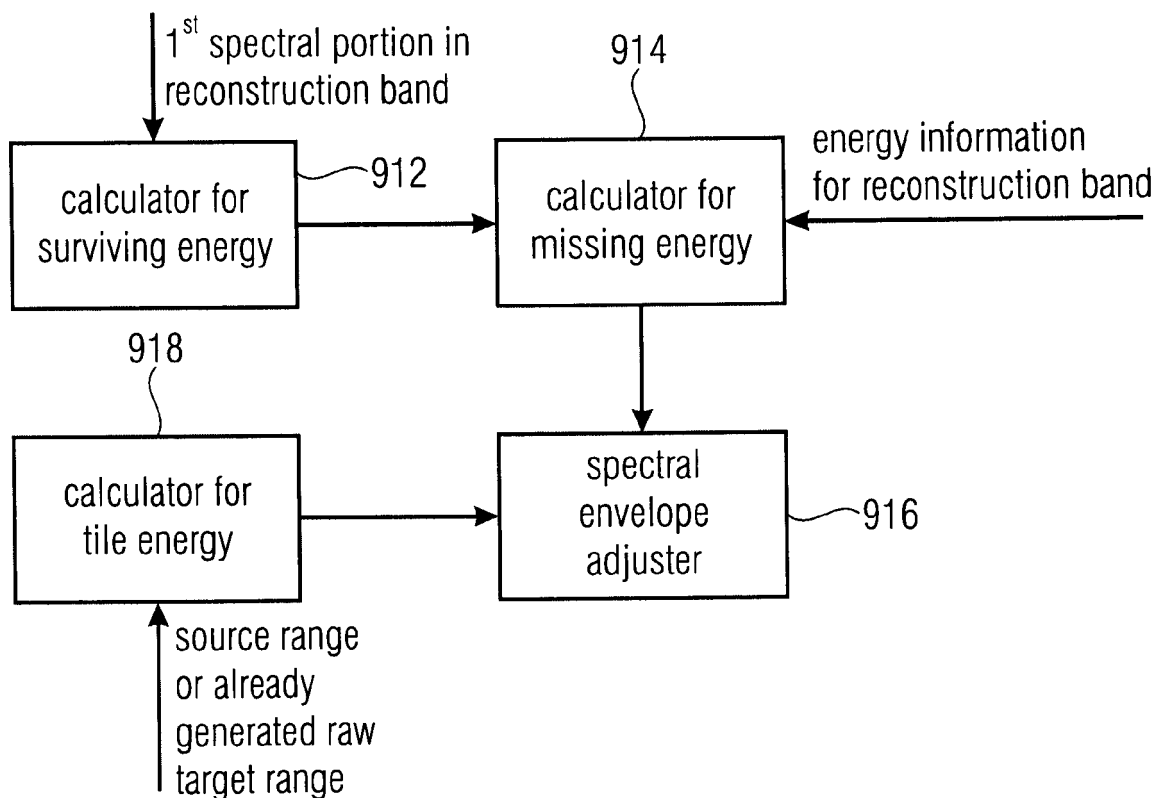
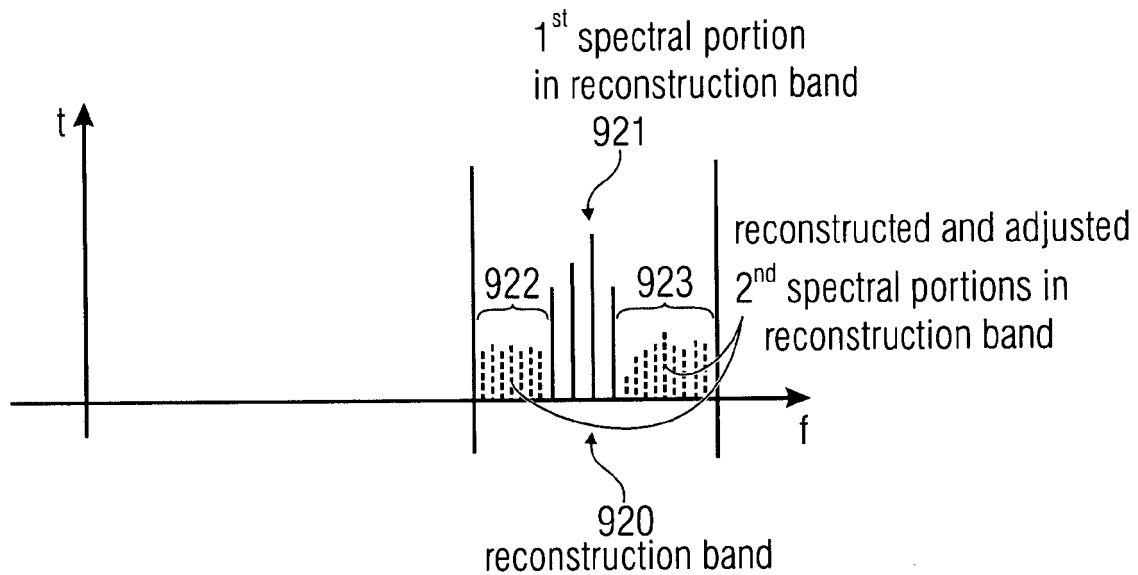


FIG 9B

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- e.g. • surviving energy: 5 units
- energy value for reconstr. band: 10 units (covers 1st and 2nd spectral portions in the reconstruction band)
- energy of source range data or raw target range data: 8 units
- missing energy: 5 units
- gain factor: $g := \sqrt{\frac{mE_k}{pE_k}} = 0.79$

→ only spectral values for the 2nd spectral portions are adjusted

→ 1st spectral portion is not influenced by the envelope adjustment

FIG 9C

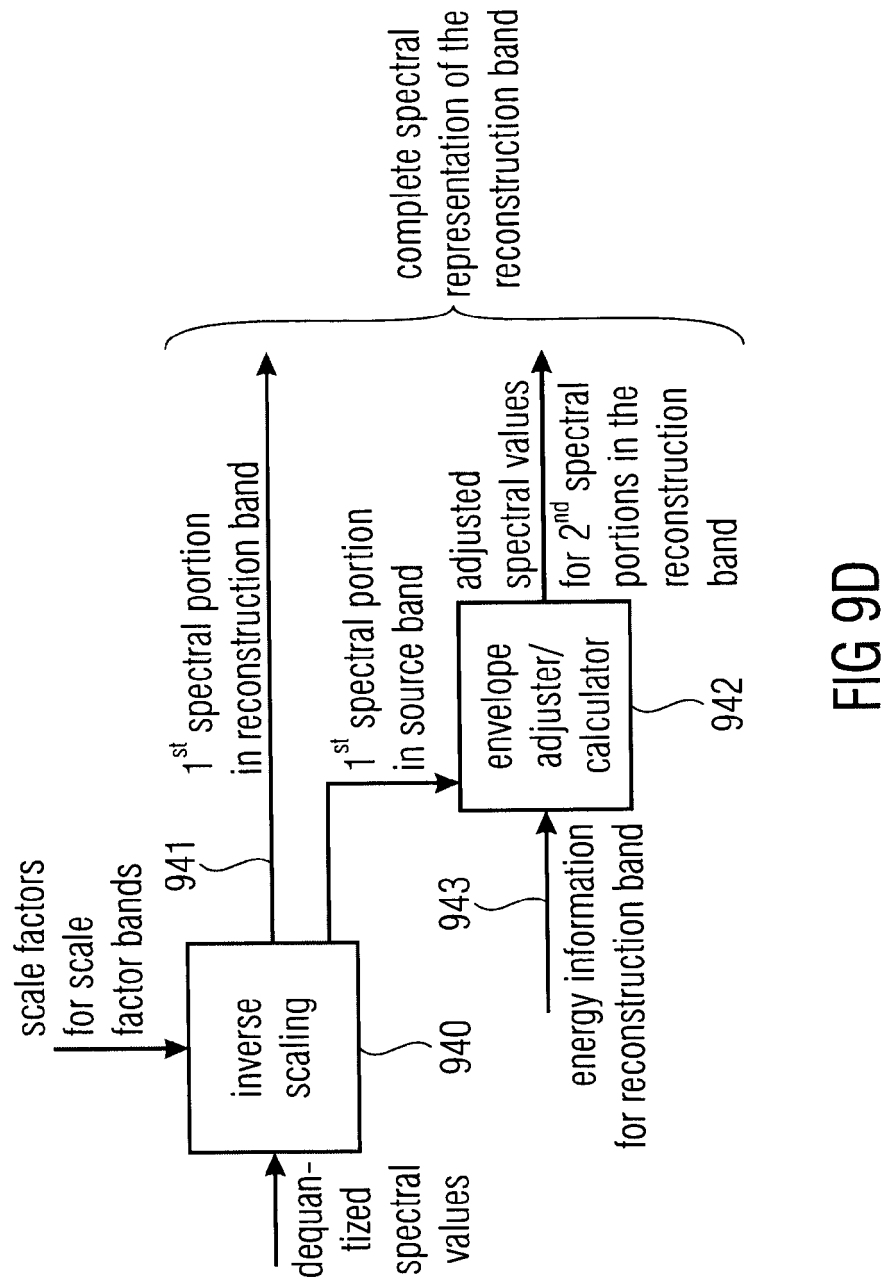


FIG 9D

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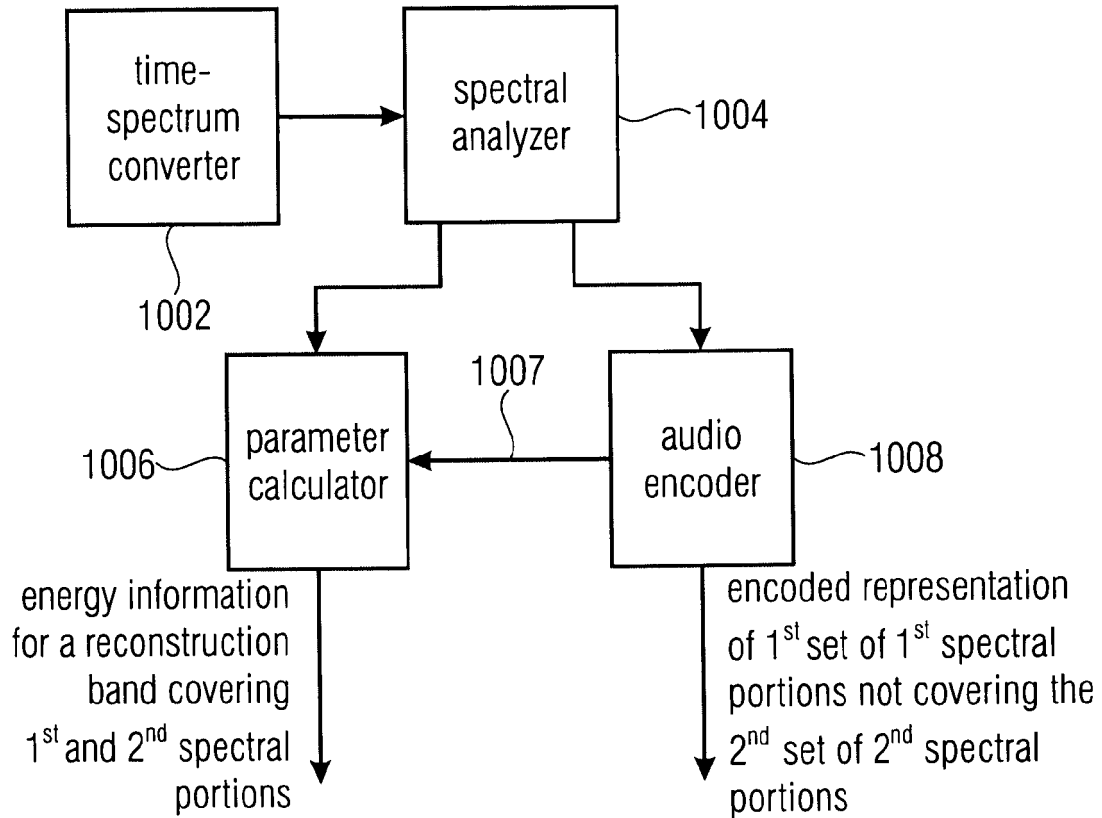


FIG 10A

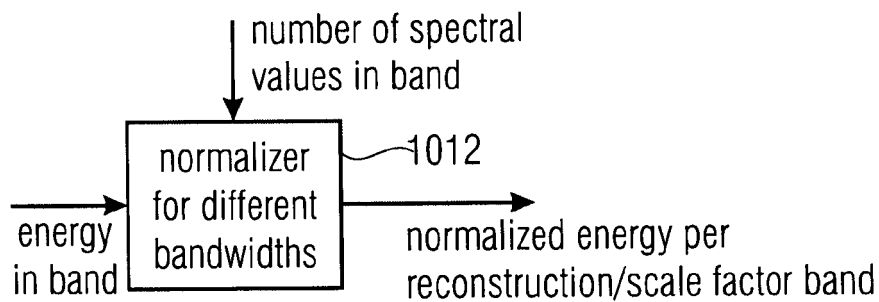


FIG 10B

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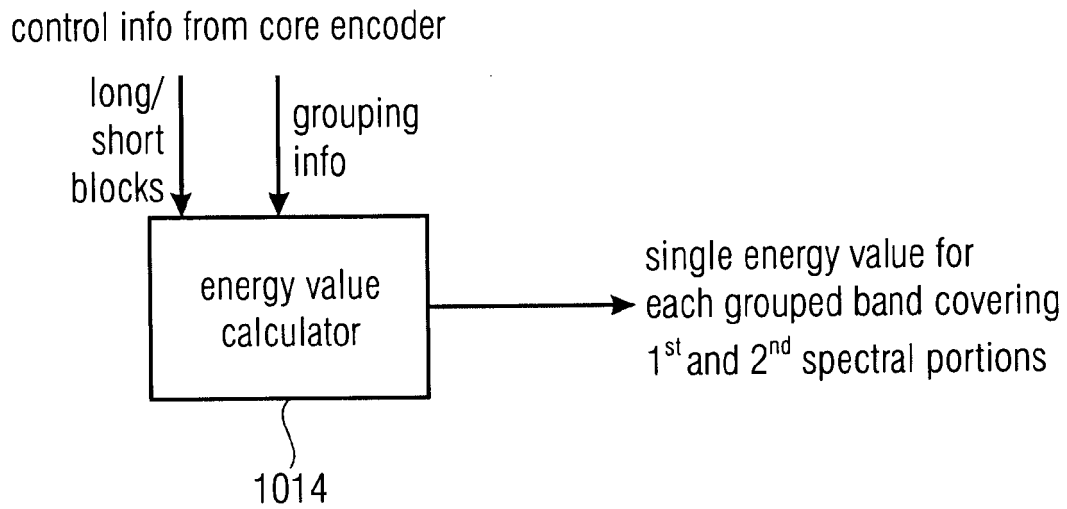


FIG 10C

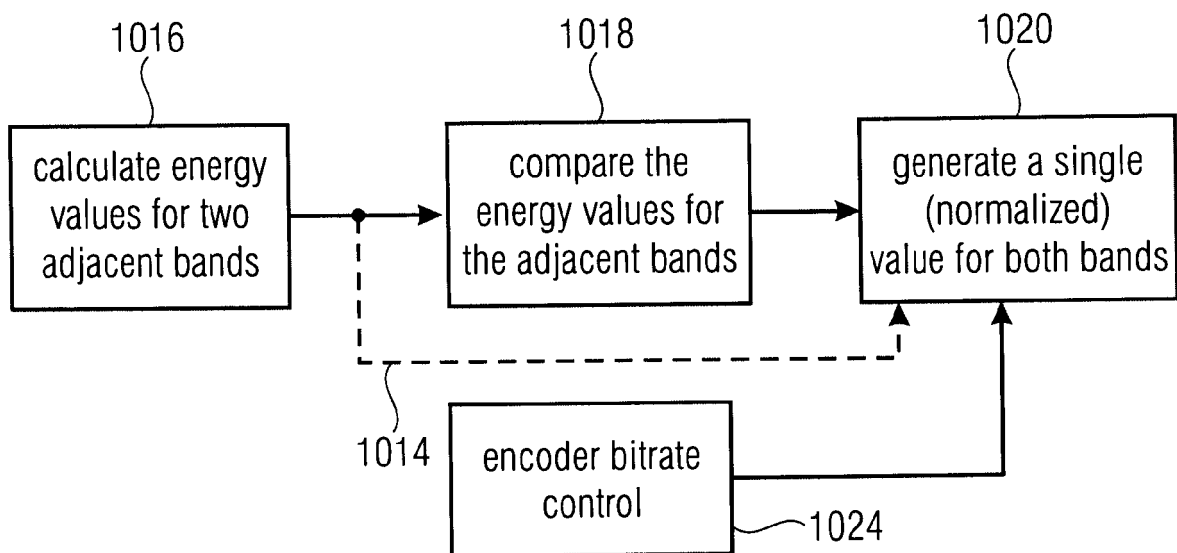


FIG 10D

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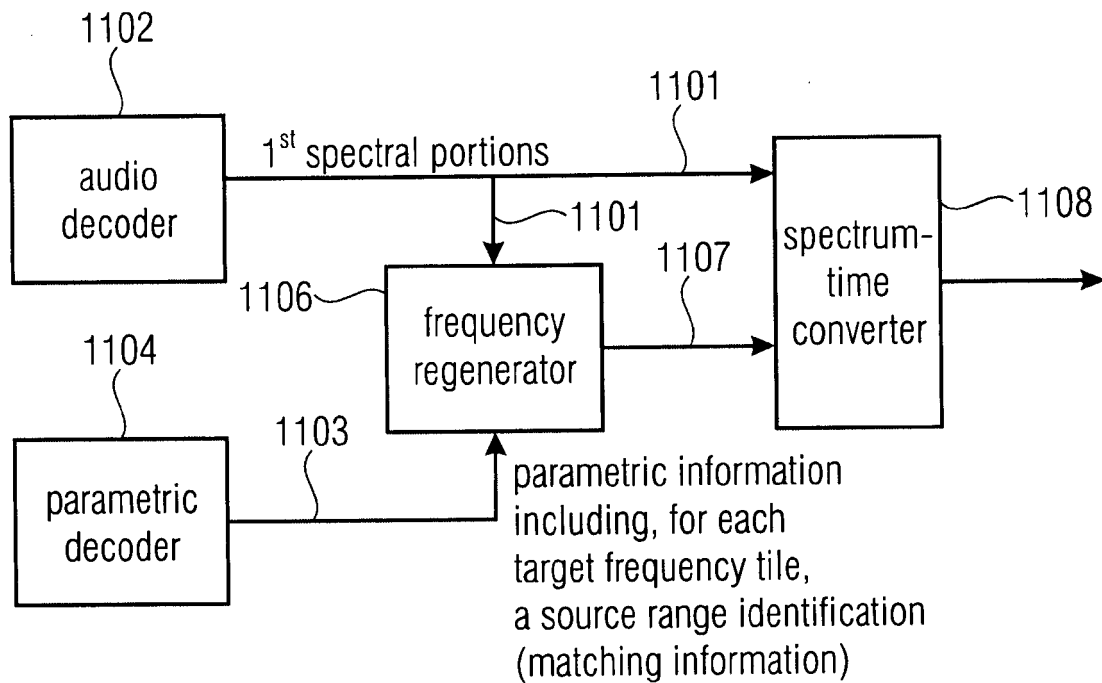


FIG 11A

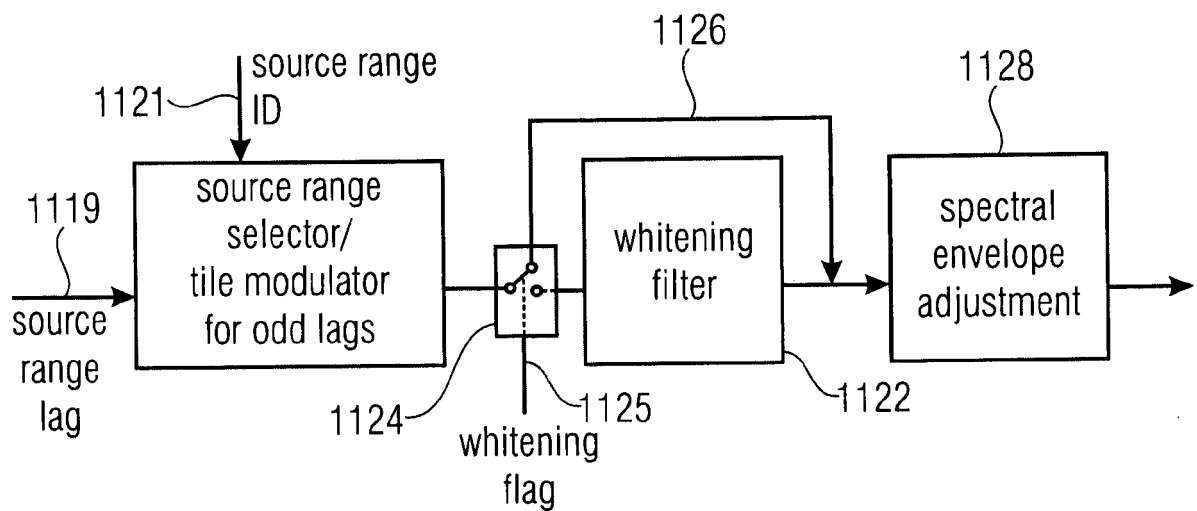


FIG 11B

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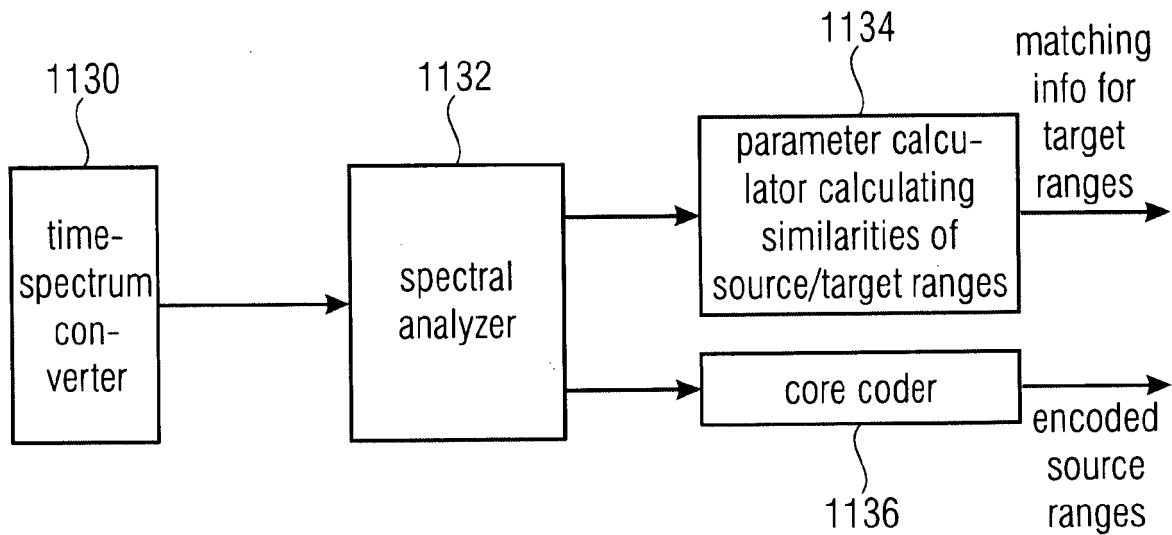


FIG 11C

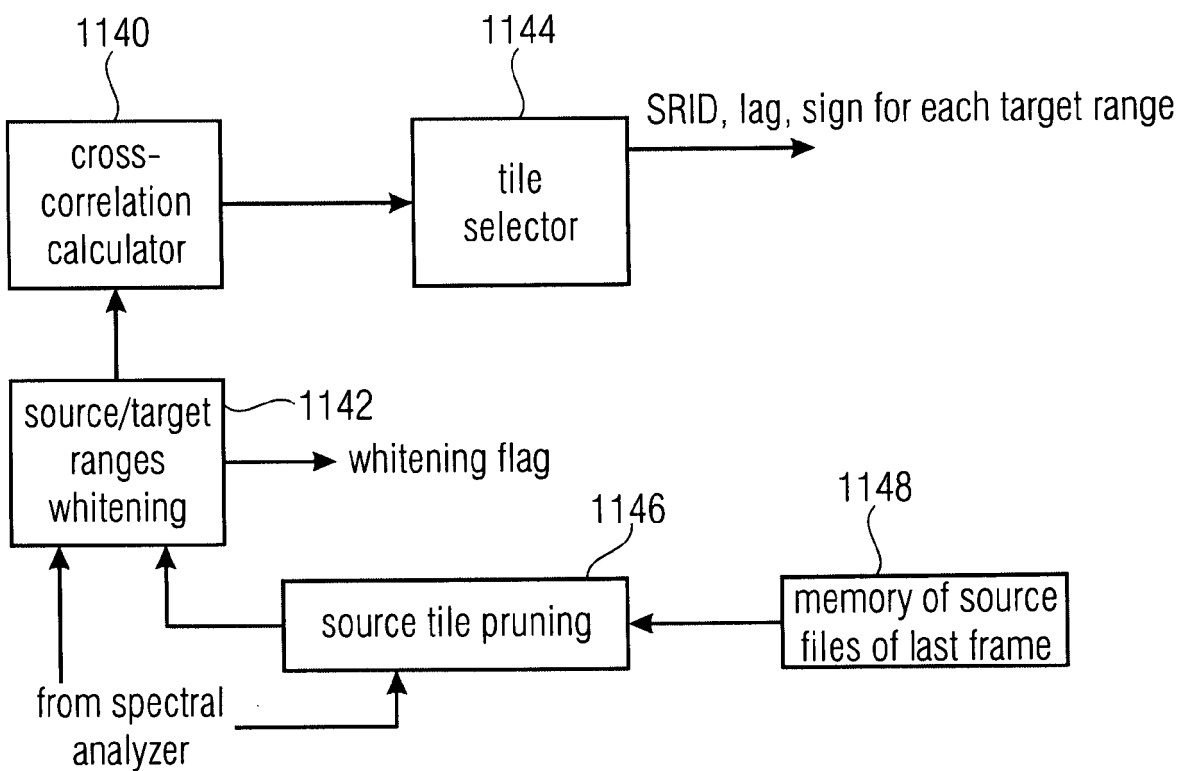


FIG 11D

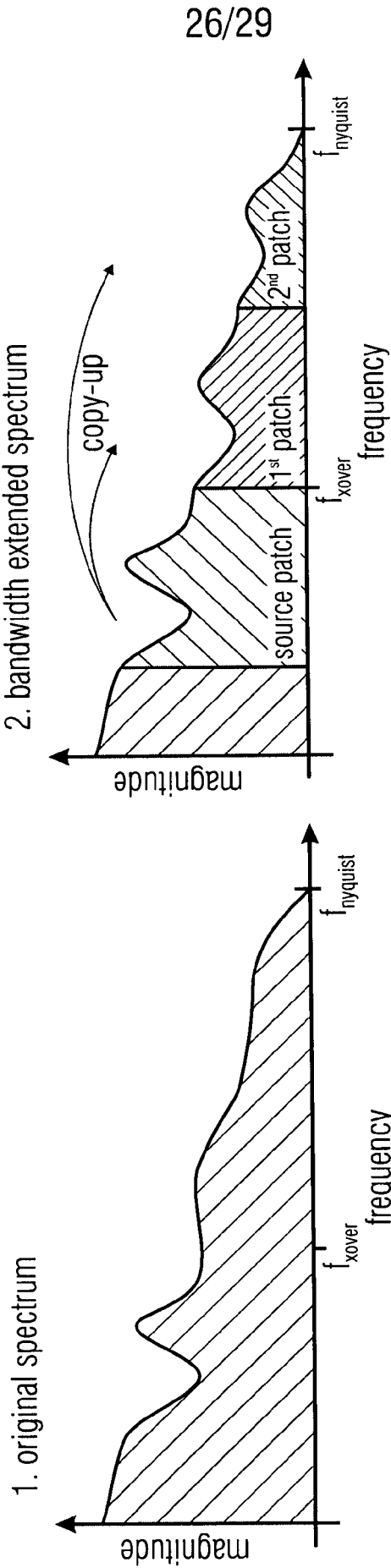


FIG 12A

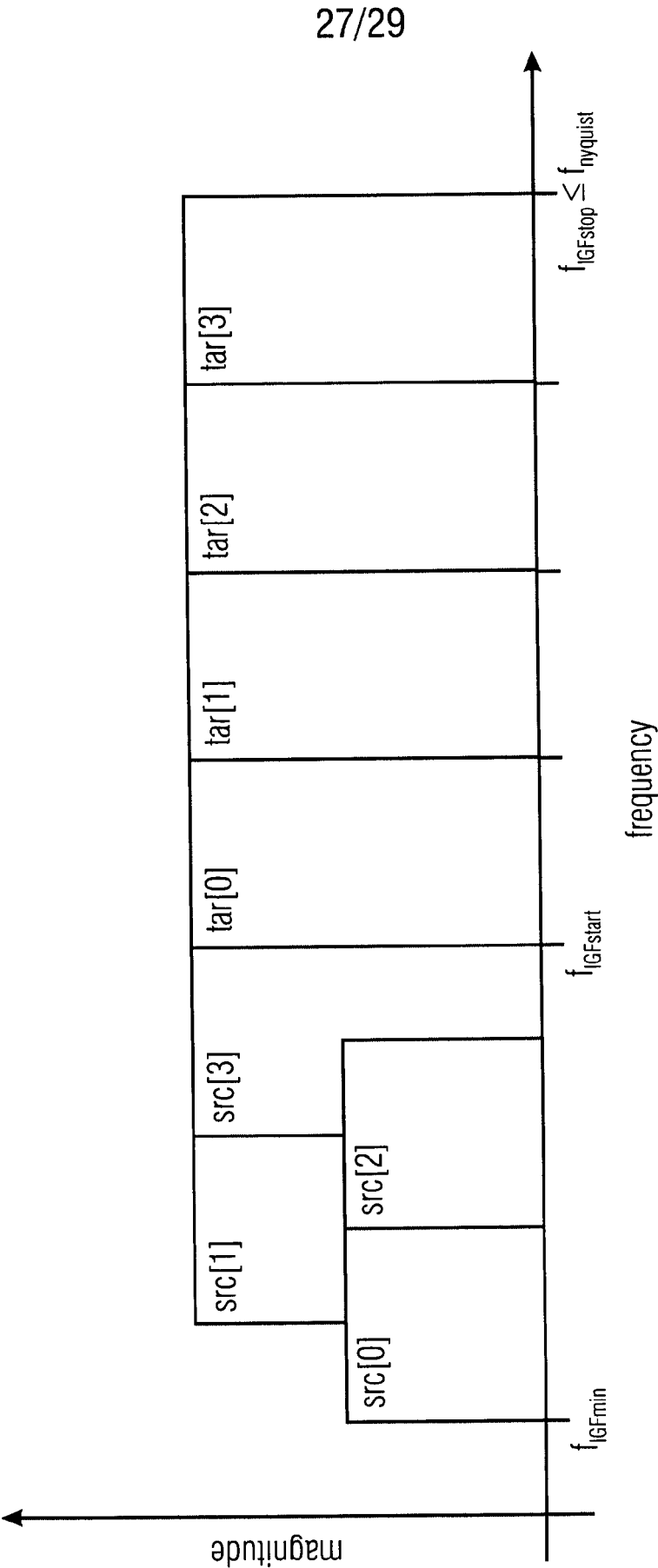


FIG 12B

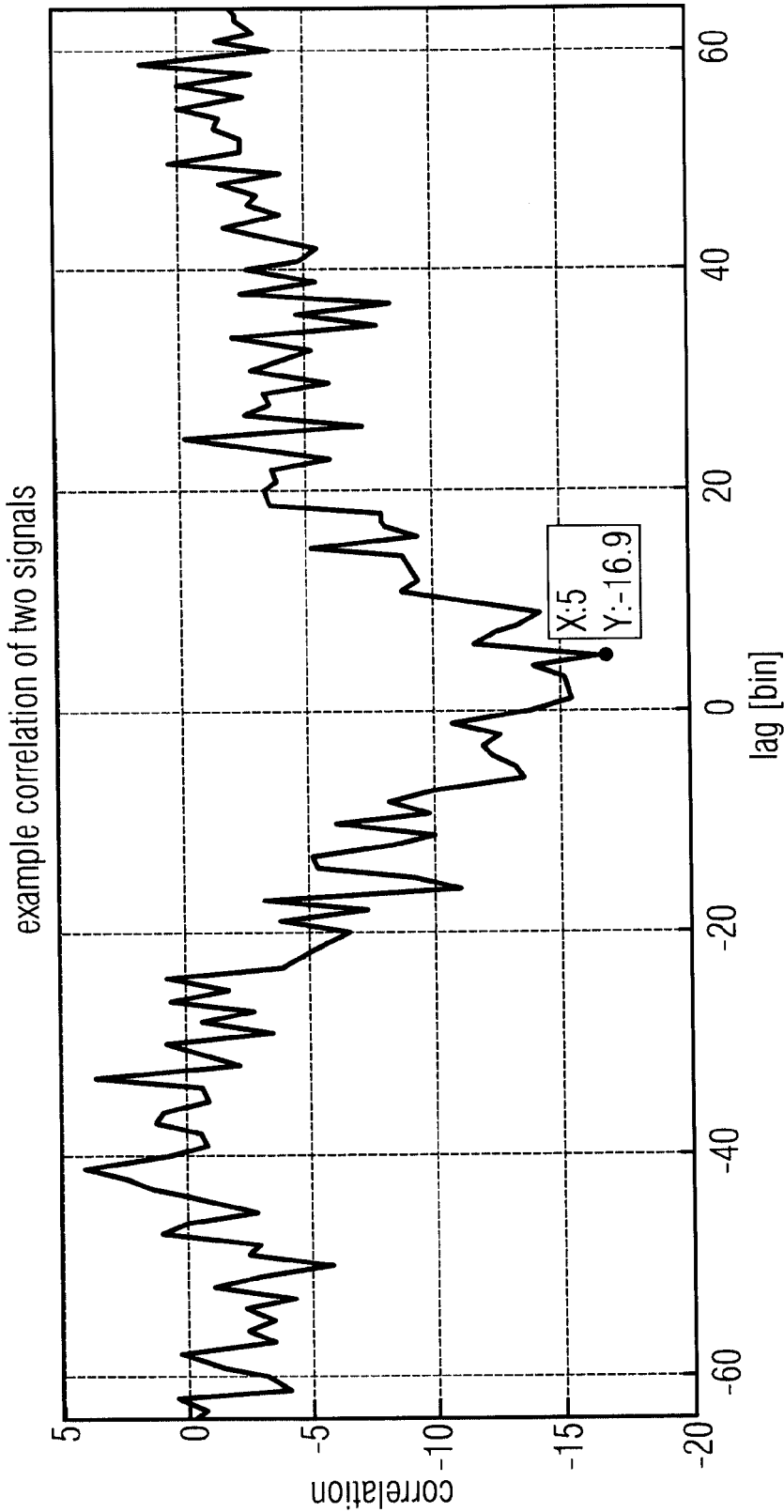


FIG 12C

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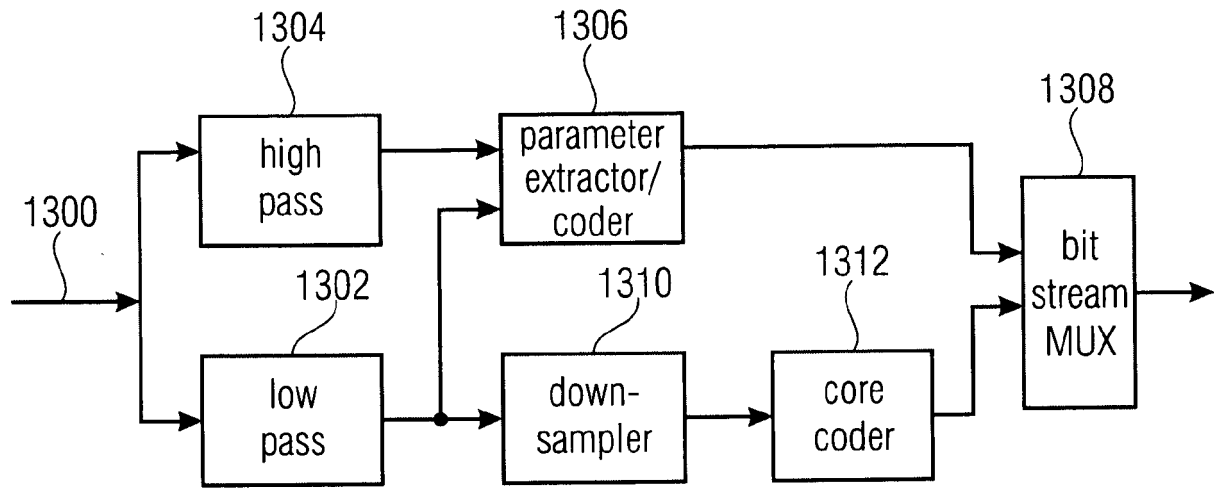


FIG 13A
(PRIOR ART)

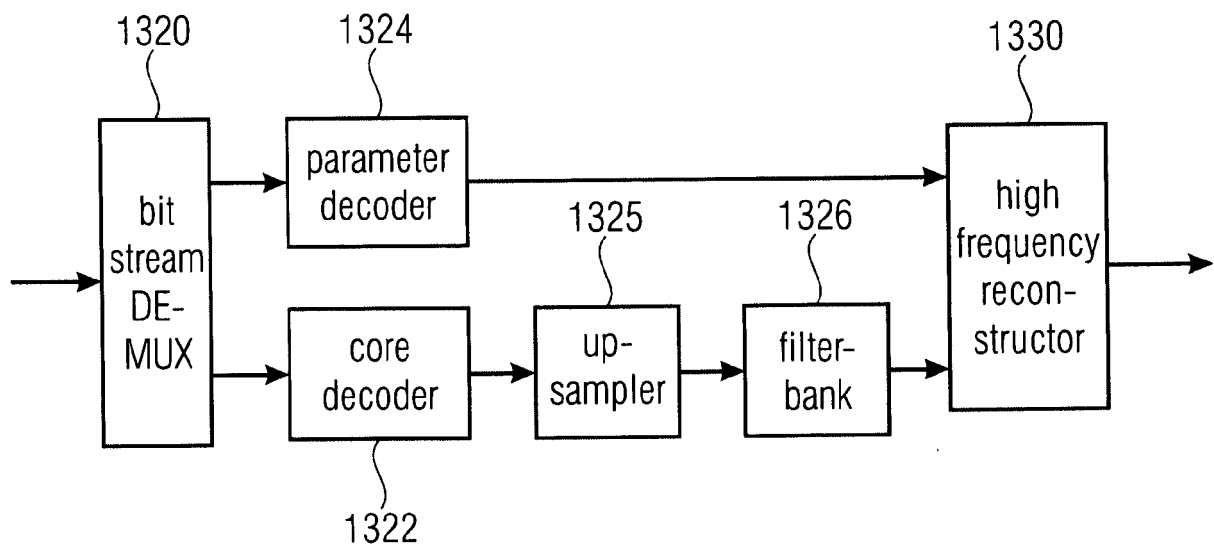


FIG 13B
(PRIOR ART)