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FÖRDERUNG DER ANGEWANDTEN FORSCHUNG
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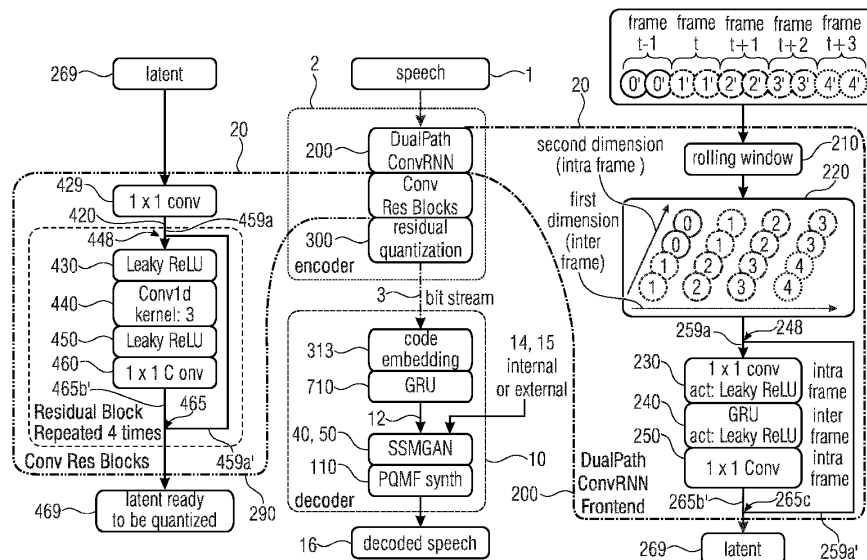


Fig. 8

(57) Abstract: There is disclosed an audio signal representation generator (2, 20) for generating an output audio signal representation (3, 469) from an input audio signal (1) including a sequence of input audio signal frames, each input audio signal frame including a sequence of input audio signal samples, the audio signal representation generator comprising: a format definer (210) configured to define a first multi-dimensional audio signal representation (220) of the input audio signal (1), the first multi-dimensional audio signal representation (220) of the input audio signal including at least: a first dimension, so that a plurality of mutually subsequent frames is ordered according to the first dimension; and a second dimension so that a plurality of samples of at least one frame are ordered according to the second dimension, at least one learnable layer (230, 250, 290, 300) configured to process the first multidimensional audio signal representation (220) of the input audio signal (1), or processed version of the first multi-dimensional audio signal representation, to

[Continued on next page]

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generate the output audio signal representation (3, 469) of the input audio signal (1).