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- (54) **Title:** CUSTOMIZATION OF RECURRENT NEURAL NETWORK TRANSDUCERS FOR SPEECH RECOGNITION

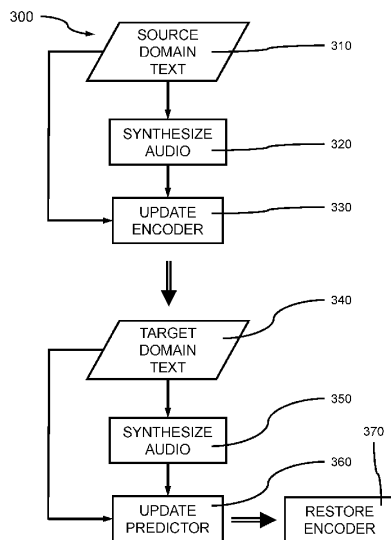


FIG. 3

(57) **Abstract:** A computer-implemented method for customizing a recurrent neural network transducer (RNN-T) is provided. The computer implemented method includes synthesizing first domain audio data from first domain text data, and feeding the synthesized first domain audio data into a trained encoder of the recurrent neural network transducer (RNN-T) having an initial condition, wherein the encoder is updated using the synthesized first domain audio data and the first domain text data. The computer implemented method further includes synthesizing second domain audio data from second domain text data, and feeding the synthesized second domain audio data into the updated encoder of the recurrent neural network transducer (RNN-T), wherein the prediction network is updated using the synthesized second domain audio data and the second domain text data. The computer implemented method further includes restoring the updated encoder to the initial condition.

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