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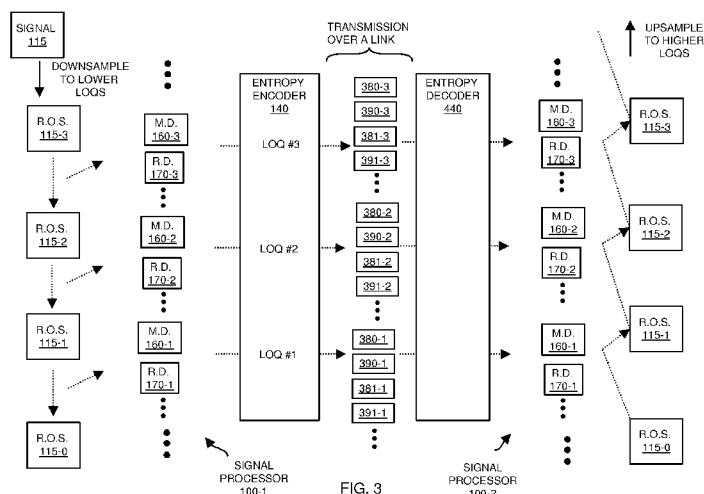
(54) **Title:** SIGNAL PROCESSING AND INHERITANCE IN A TIERED SIGNAL QUALITY HIERARCHY

FIG. 3

(57) **Abstract:** A signal processor is configured to encode a signal in a hierarchy including multiple levels of quality. The signal processor produces a rendition of the signal for at least a first level of quality. The signal processor generates sets of reconstruction data specifying how to convert the rendition of the signal at the first level of quality into a rendition of the signal at a second (higher) level of quality in the hierarchy, potentially leveraging on available reference signals. According to one arrangement, the signal processor utilizes an entropy encoder to encode the reconstruction data. Based on probability distribution information for one or more symbols in each set of reconstruction data and based on probability distribution information and/or other encoding parameters inherited from previous levels of quality, the entropy encoder encodes the reconstruction data into an encoded value or bit string. Using the probability distribution information, an entropy decoder converts the encoded value or bit string back into the reconstruction data.