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TRANSFORM –DOMAIN CORRECTION OF REAL –DOMAIN ERRORS

ABSTRACT

This invention provides methods, systems and apparatus for transform–domain correction of real-domain errors in the processing of transform, transform coded, and coded data. After inverse transformation of transform data in a step (120), the high-precision numbers (130) converted to integers and clipped to an allowed range (150) forming converted data. High-precision differences are obtained by subtracting converted data from the high–precision output of the inverse transform. The differences are re-transformed back to the transform domain and saved. Then after re-transforming the processed converted data, the decoded differences, the dequantized differences, or the transformed differences can be used in the transform domain to remove the real-domain errors introduced by the original conversion to integers and clipping tothe allowed range.

FIG1a



