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(71) Applicant *(for all designated States except US)*: **NOKIA CORPORATION** [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).

(71) Applicant *(for LC only)*: **NOKIA INC** [US/US]; 6000 Connection Drive, Irving, Texas 75039 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **ZHANG, Cixun** [CN/FI]; Insinöörinkatu 60 A 33 Cell 3, FI-33720 Tampere (FI). **UGUR, Kemal** [TR/FI]; Kuninkaankatu 5 J 221, FI-33210 Tampere (FI). **LAINEMA, Jani** [FI/FI]; Kisakentäkatu 12 B 6, FI-33230 Tampere (FI). **HALLAPURO, Antti, Olli** [FI/FI]; Opiskelijankatu 11 A 12, FI-33720 Tampere (FI).

(74) Agent: **ALBERT, JR., G., Peter**; Foley & Lardner, LLP, P.O. Box 80278, San Diego, CA 92130 (US).

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(54) **Title:** JOINT CODING OF MULTIPLE TRANSFORM BLOCKS WITH REDUCED NUMBER OF COEFFICIENTS

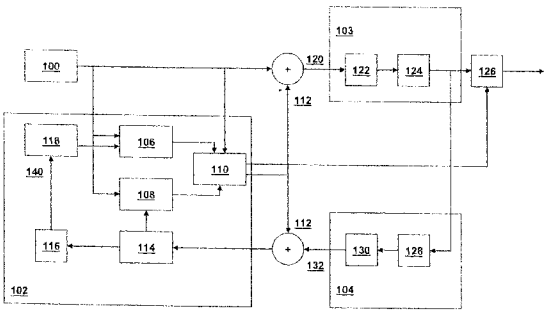


Figure 1

(57) **Abstract:** A system and method for video/image encoding and decoding, where transform coefficients associated with a plurality of blocks are reorganized and coded together. Various embodiments perform transform and quantization and generate transform coefficients, where the coefficients of the transform blocks are reorganized and interleaved. Additionally, an encoding process involves coding only a subset of the transform coefficients belonging to the transform blocks resulting in one or more transform blocks less than the original number of transform blocks, and putting this into a bitstream. A decoding process involves decoding the one or more resulting transform blocks including the subset of transform coefficients from the bistream, the transform coefficients being put in an array and decoded. The decoder de-interleaves the decoded transform coefficients and any remaining coefficients of the one or more transform blocks are filled in according to a plurality of different methods. After the one or more transform blocks are fully decoded, inverse transform and inverse quantization are performed and residual data is generated.

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