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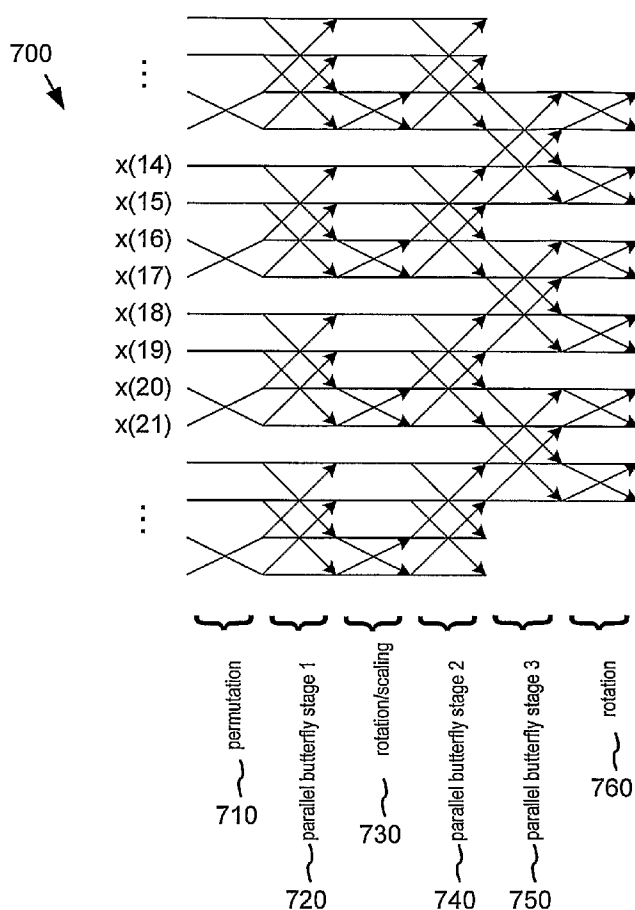
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: SIMD LAPPED TRANSFORM-BASED DIGITAL MEDIA ENCODING/DECODING



(57) Abstract: A block transform-based digital media codec achieves faster performance by re-mapping components of the digital media data into vectors or parallel units on which many operations of the transforms can be performed on a parallel or single-instruction, multiple data (SIMD) basis. In the case of a one-dimensional lapped biorthogonal transform, the digital media data components are re-mapped into vectors on which butterfly stages of both overlap pre-/post-filter and block transform portions of the lapped transform can be performed on a SIMD basis. In the case of a two-dimensional lapped biorthogonal transform, the digital media data components are re-mapped into vectors on which a Hadamard operator of both overlap pre-/post-filter and block transform can be performed on a SIMD basis.



- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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