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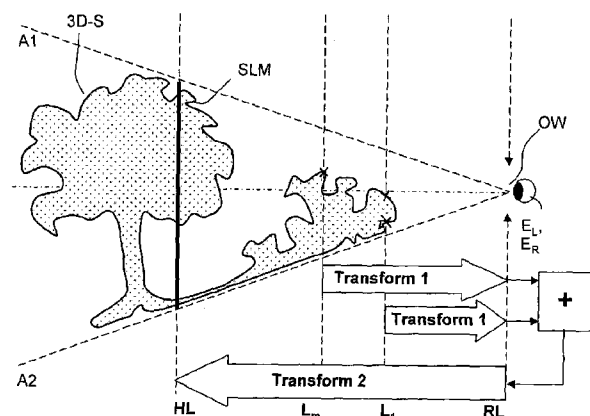
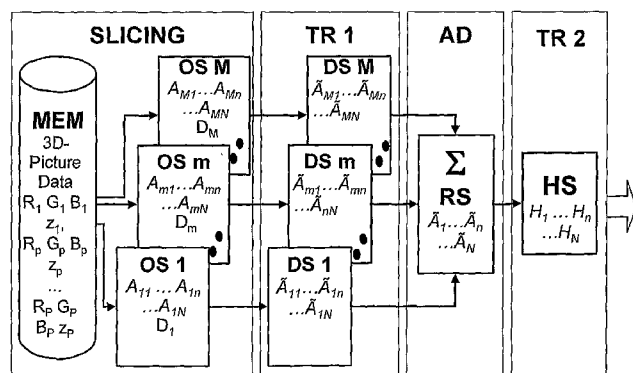
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(54) Title: METHOD AND DEVICE FOR COMPUTING COMPUTER-GENERATED VIDEO HOLOGRAMS



(57) Abstract: The data defining an object to be holographically reconstructed (3D-S) is first arranged into a number of virtual section layers (L_m), each layer defining a two-dimensional object data sets (OS_m), such that a video hologram data set (HS) can be calculated from some or all of these two-dimensional object data sets. The first step is to transform each two-dimensional object data set to a two-dimensional wave field distribution. This wave field distribution is calculated for a virtual observer window (OW) in a reference layer (RL) at a finite distance (D_m) from the section layer (L_m). Next, the calculated two-dimensional wave field distributions for the virtual observer window, for all two-dimensional object data sets of section layers, are added to define an aggregated observer window data set. Then, the aggregated observer window data set is transformed from the reference layer (RL) to the video hologram layer (HL), to generate the video hologram data set (HS) for the computer-generated video hologram.



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