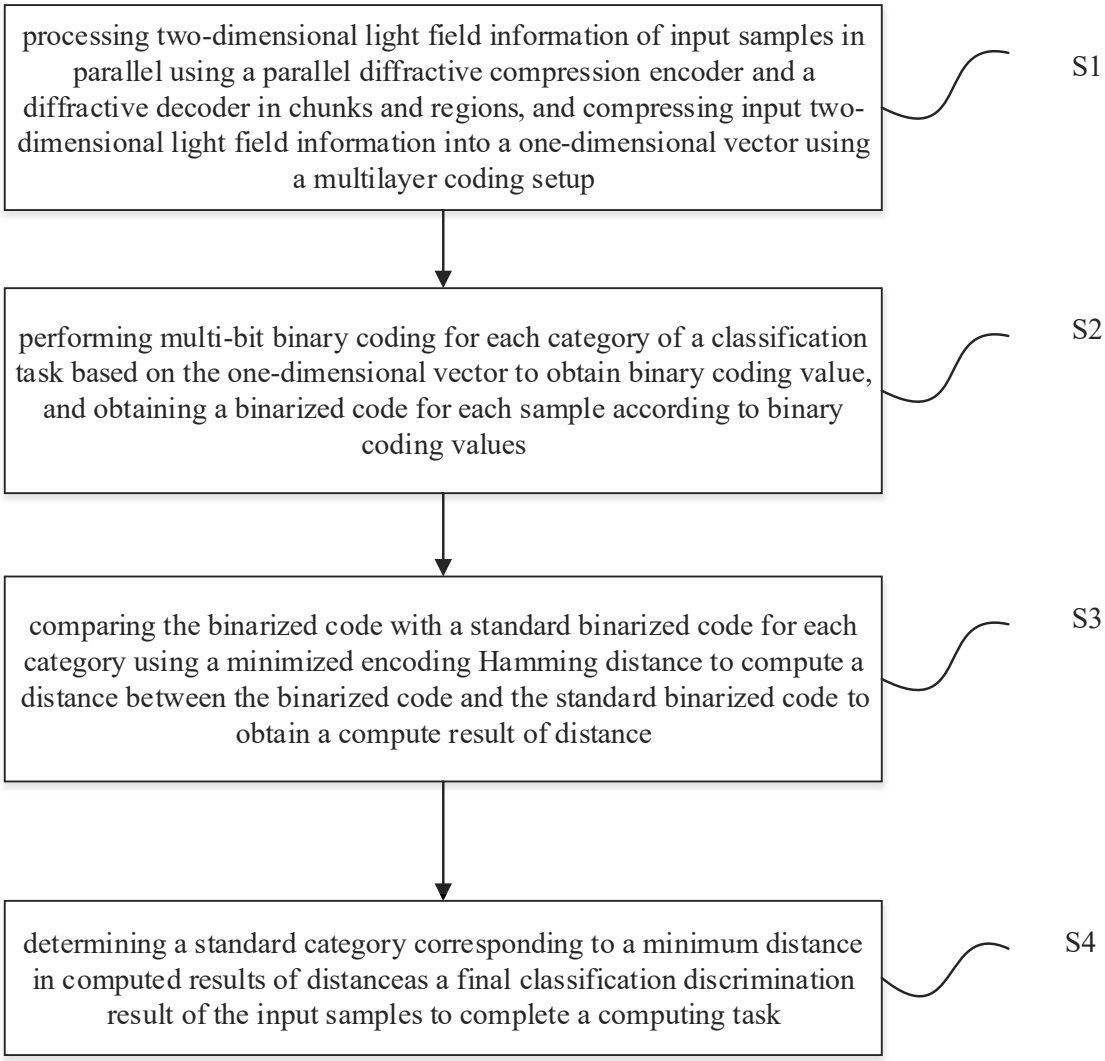

processing two-dimensional light field information of input samples in parallel using a parallel diffractive compression encoder and a diffractive decoder in chunks and regions, and compressing input two-dimensional light field information into a one-dimensional vector using a multilayer coding setup
S1
performing multi-bit binary coding for each category of a classification task based on the one-dimensional vector to obtain binary coding value, and obtaining a binarized code for each sample according to binary coding values
S2
comparing the binarized code with a standard binarized code for each category using a minimized encoding Hamming distance to compute a distance between the binarized code and the standard binarized code to obtain a compute result of distance
S3
determining a standard category corresponding to a minimum distance in computed results of distanceas a final classification discrimination result of the input samples to complete a computing task
S4

FIG. 4