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STRUCTURAL COLOR

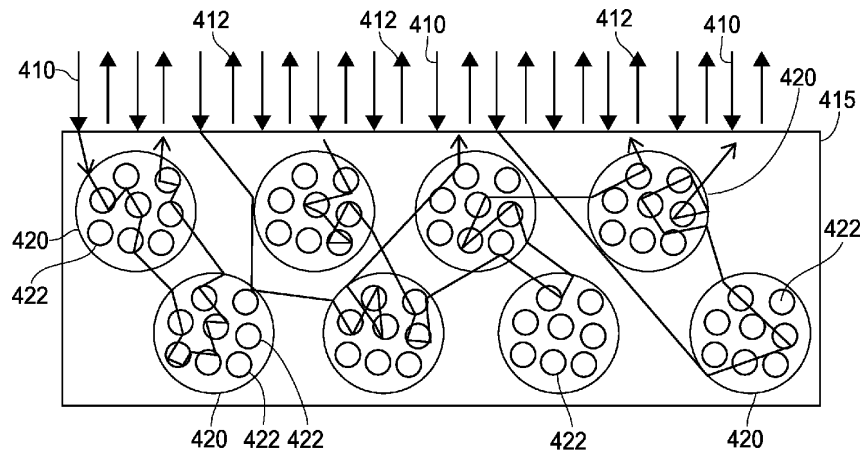


FIG. 4B

(57) Abstract: Exemplary embodiments relate to techniques for determining structural color from parameters of an array of nanoparticles. The techniques include inputting structural and optical parameters and performing a probabilistic simulation to determine the structural color. An evolutionary optimization may be performed to determine parameters of the array of nanoparticles according to desired properties of structural color. The evolutionary optimization may employ the probabilistic simulation and further adjust one or more parameters of the array to approximate the desired properties of the structural color. Based on applying the probabilistic simulation, the technique may generate an output describing a value, or a range of values, for the one or more parameters of the array of nanoparticles that are selected to approximate the desired properties of the structural color.

[Continued on next page]

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