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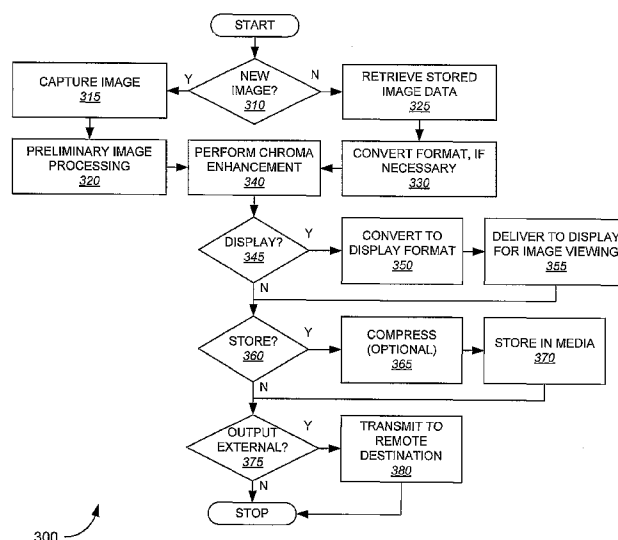
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(54) Title: **ADVANCED CHROMA ENHANCEMENT**



(57) Abstract: To improve the color performance, disclosed herein are advanced methods for improving chroma accuracy, by reducing the color difference between reproduced colors and human perceptual responses, as well as enhancing preferred colors. Chroma enhancement may be performed by selecting one of a plurality of chroma enhancement matrices (CEM), and converting a received color by multiplying it with the chroma enhancement matrix (or a matrix comprising the CEM). The matrix may be selected by mapping a received color value into a region and selecting the corresponding chroma enhancement matrix (or alternately, the corresponding parameters, from which color conversion may be performed). Additionally, enhancement may be adjusted for a variety of environments or preferences. For example, one of a plurality of sets of matrices may be selected in accordance with a desired mode. Optimization techniques for determining the desired chroma enhancement matrices for one or more modes are disclosed. Various alternate embodiments and aspects are also disclosed.

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