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(54) Title: HIGH DURABILITY COLOR COMBINER

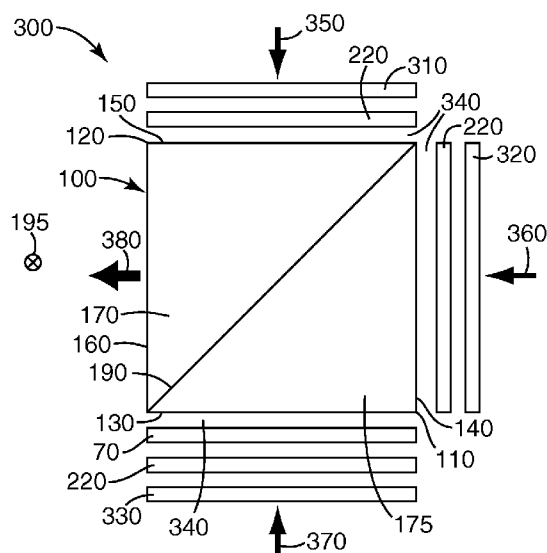


Fig. 3A

(57) Abstract: Optical elements, color combiners using the optical elements, and image projectors using the color combiners are described. The optical elements can be configured as color combiners that receive different wavelength spectrums of light and produce a combined light output that includes the different wavelength spectrums of light. The optical elements include a wavelength selective dichroic mirror that reflects a major portion of actinic light that can damage a reflective polarizer within the optical element. The wavelength selective dichroic mirror transmits a major portion of other wavelengths of light. The resulting color combiners using the optical element may have improved durability compared to a color combiner lacking the wavelength selective dichroic mirror. Image projectors using the color combiners can include reflective (including digital micro-mirror) or polarization (including liquid crystal) imaging modules.



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