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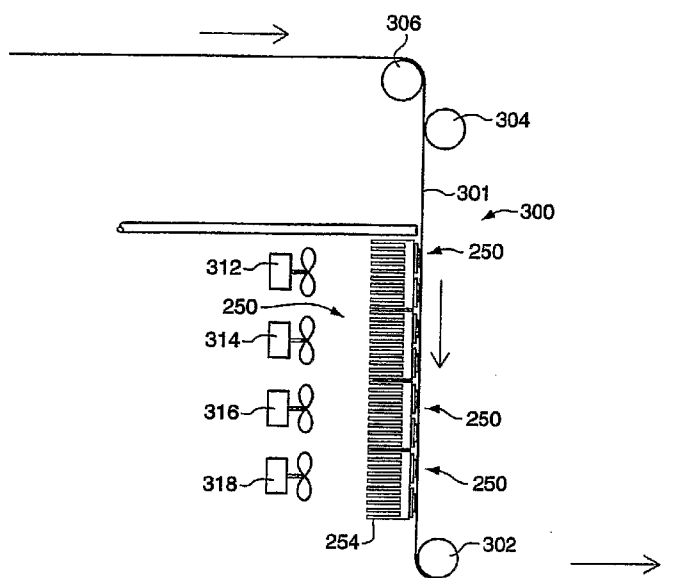
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(54) Title: UV CURING METHOD AND APPARATUS



(57) Abstract: A UV curing apparatus (300) and method is provided for enhancing UV curing of inks, coatings and adhesives containing UV photoinitiators deposited on web (301) moved by rollers (302, 304, 306), by subjecting them to UV light at different wavelengths. UV-LED assemblies (250) are alternated in rows and emit light at wavelengths between 180 nm and 420 nm. A row emitting visible light can be included for reviewing of the apparatus. A cooling system (fans: 312, 314, 316, 318; heat fins: 254) may maintain the UV-LED assemblies at a desired temperature to maintain light intensity. The assemblies are placed at a distance from the product to provide a uniform pattern of light diverging from the UV-LED chips of at least 50% of the power output of the chips at a viewing cone angle of $2\theta_{1/2}$. The ink, coating or adhesive can have photoinitiators activated by more than one wavelength.

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