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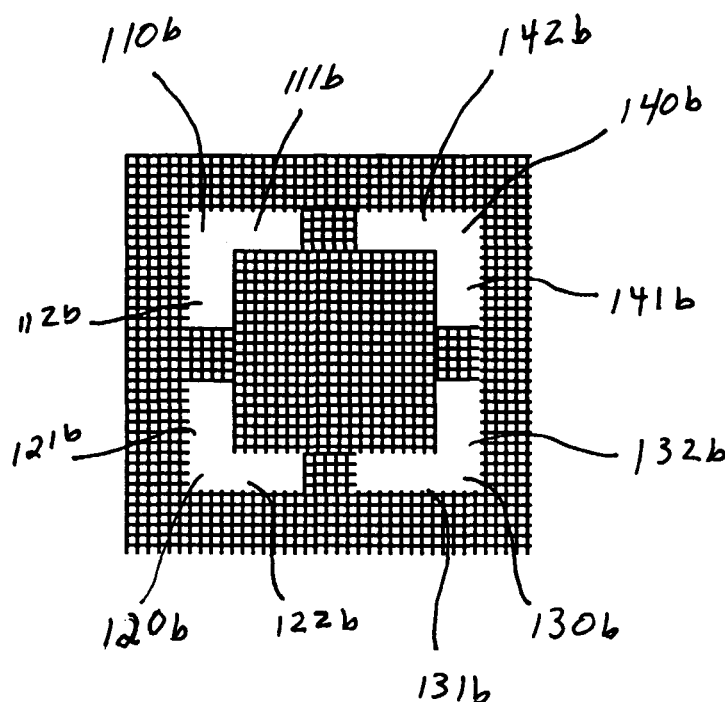
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(54) Title: A METHOD OF ILLUMINATING A PHOTOMASK USING CHEVRON ILLUMINATION



(57) Abstract: A microlithographic tool, such as a projection stepper, for manufacturing integrated circuits, shapes light that illuminates a photomask with a chevron illumination system. The system uses either a chevron aperture mask of diffractive optical elements to shape a light source into four chevrons (110b, 120b, 130b, 140b). The chevrons are located in the corners of the circular pupil of the condenser lens. The chevrons may be a small square poles at the corners or as large as an annular square ring. The chevrons provide superior performance for illuminating conventional X and Y oriented features of a photomask.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.