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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

[Continued on next page]

(54) **Title**: ROLL-TO-ROLL DIGITAL PHOTOLITHOGRAPHY

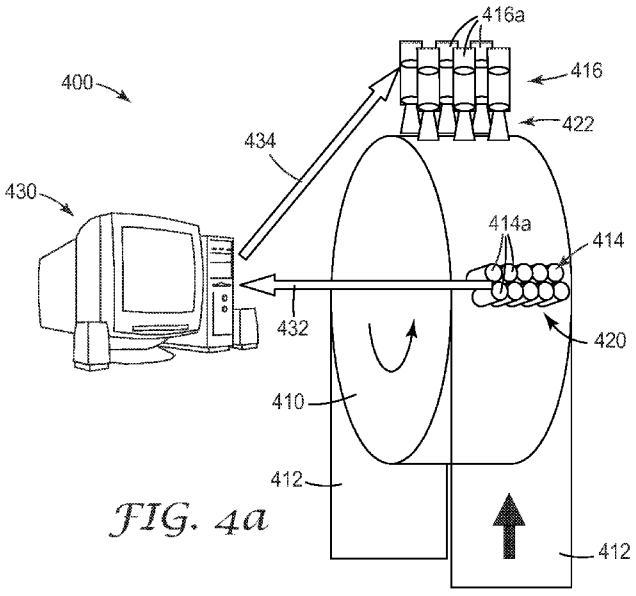


FIG. 4a

(57) **Abstract**: Methods of making flexible circuit films include providing a polymer film or other flexible substrate having a plurality of alignment marks and a photosensitive material thereon. The substrate passes around a suitable roller, belt, or other inelastic conveyor such that the substrate and the conveyor move together at least from a first location to a second location. Positions of a first set of the alignment marks on a first portion of the substrate are measured when such portion is at the first location, and the measured positions can be used to calculate a distortion of the substrate. The photosensitive material is then patternwise exposed when the first portion of the substrate has moved to the second location. The patternwise exposing is based on the measured positions of the first set of alignment marks, and may include exposing the web with a distortion-adjusted pattern. Related systems and articles are also disclosed.

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— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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