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(54) **Title:** MULTI-LAYER PRINTING PROCESS

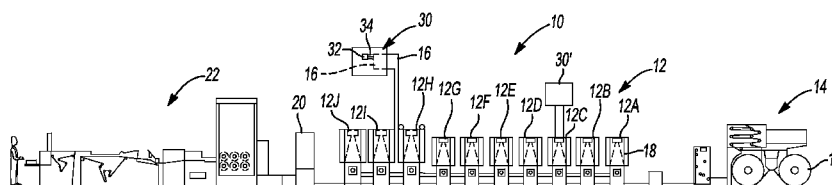


Fig-1

(57) **Abstract:** A system and method for forming indicia on a substrate. The system includes a feed system for feeding the substrate and a plurality of stations each operable to apply a processing step to the substrate. A first of the plurality of stations applies an energy curable ink to the substrate using a printing process. In some embodiments, this printing process is a gravure cylinder having indicia grooves formed on the gravure cylinder. The indicia grooves on the cylinder retain the energy curable ink until contact with the substrate whereby the energy curable ink is applied to the substrate. A curing unit is disposed downstream of the first of the plurality of stations. The curing unit receives the substrate and outputs an electron beam directed toward the energy curable ink to cure the energy curable ink and form a resultant energy curable layer upon the substrate.

