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(54) Title of the Invention: **Synthesis of superposition shape images by light interacting with superposed layers of lenslet gratings**
Abstract Title: **Synthesis of superposition shape images by light interacting with superposed layers of lenslet gratings**

(57) The present invention describes methods and apparatuses for creating superposition shape images by superposed base (102,107) and revealing (101) layers of lenslet gratings. The superposition shape images form a message recognizable by a human observer or by an image acquisition and computing device such as a smartphone. The superposition shape images may be created by different superposition techniques ranging from 1D moire, 2D moire and level-line moire superposition techniques to lenticular image and phase shift superposition techniques. Moire superposition techniques enable creating superposition shape images at different apparent depth levels. Applications comprise the protection of documents and valuable articles against counterfeits, the creation of eye-catching advertisements as well as the decoration of buildings and exhibitions.

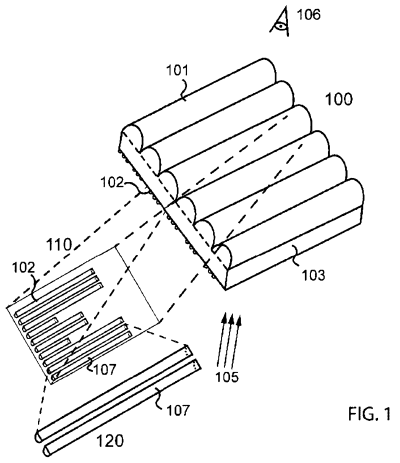

FIG. 1

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