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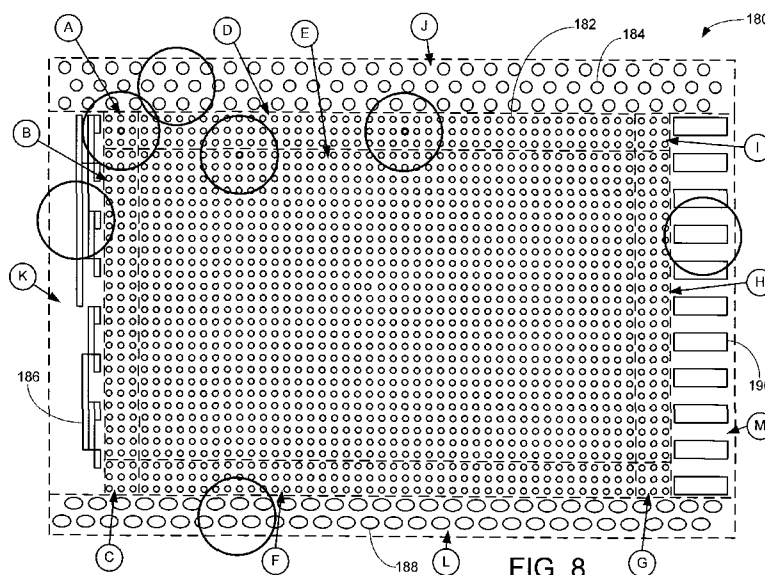
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(54) Title: WRITING REPEATING PATTERNS OF FEATURES TO A SUBSTRATE



(57) Abstract: Method (200, 240) and apparatus (140, 260) for writing repeating patterns of features (106, 160) to a substrate (102, 142), such as a data storage medium. In accordance with some embodiments, a multi-dimensional pattern of discrete features of different sizes (162, 164, 166, 182, 184, 186, 188, 190, 222, 224, 226, 228, 230) to be written to a substrate is divided into a plurality of contiguous regions (206, 232, 244). A unique set of compensation values is assigned to each region (208, 246). A write beam of a write system (140, 270) is used to write the features to the substrate responsive to said unique sets of compensation values so that all of the features having a common size in at least one region are written using the same compensation values from the associated set (212, 250).