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(54) Title of the Invention: **Method and apparatus for 3D-measurement by detecting a predetermined pattern**
 Abstract Title: **Method and apparatus for 3D-measurement by detecting a predetermined pattern**

(57) An image information processing apparatus performs three-dimensional measurement of an object using a captured image obtained by projecting onto the object a projection pattern containing a two-dimensional symbol sequence that is obtained by assigning a predetermined symbol to each code in a projection code string in which a plurality of types of codes are arranged two-dimensionally and capturing an image of the object. The apparatus obtains an imaging pattern by extracting a symbol sequence from the captured image, and converts symbol dots in the imaging pattern into corresponding codes, thereby obtaining an imaging code string. The apparatus obtains a predetermined number of codes according to one sampling feature selected from a plurality of types of sampling features, generates an information code string by arranging the obtained codes, and determining the correspondence between the information code string and a part of the projection code string, thereby performing three-dimensional measurement.

FIG. 1

