

Abstract

1. Method and apparatus for identifying the position of components

2.1. In known methods, the relative position of connections (1) and/or edges of components (2) with respect to a conveying apparatus (4) is determined in which a camera (6) with an image evaluation unit (7) connected downstream records the connections and places the relative position - determined therefrom - of the connections (1) with respect to the camera (6) in relation to a relative position - assumed to be known - between the camera (6) and the conveying apparatus (4). Transient processes and displacements between the camera (6) and the conveying apparatus (4) corrupt the result.

2.2. The connections (1) are recorded together with a position marking (10) that is fixedly connected to the conveying apparatus (4). In this case, the position marking (10) is itself situated in direct proximity to the connections (1) or is imaged there by means of an optical imaging device (12). More accurate position identification is ensured as a result of this. A moving conveying apparatus (4) and a short exposure time for the recording by the camera (6) also allow for fast position identification.

2.3. Vision systems for automatic component-mounting machines

3. FIG. 2