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(54) Title: CARRIER TAPE SYSTEM AND SPROCKET FOR REDUCING JAMS

(57) Abstract: A pick and place system includes a carrier tape radial feeder and a pick head configured to pick up the component of the plurality of components of the carrier tape. The carrier tape radial feeder includes a drive sprocket having a plurality of sprocket teeth, a component cut and/or present location including a tooling datum surface and a pulldown mechanism located proximate the component cut and/or present location. The drive sprocket is configured to rotate, the sprocket teeth engage with carrier holes in a carrier tape carrying a plurality of components to propel the carrier tape forward as the drive sprocket rotates, the pulldown mechanism is configured to pull down the carrier tape until a component bottoms out on the tooling datum surface, and the drive sprocket is configured to flex in response to the pulldown mechanism pulling down the carrier tape. Methods of feeding components are also disclosed.



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