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# (12) United States Patent Howell

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# (54) METHOD AND APPARATUS FOR ASSEMBLING ELECTRONICS

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## (57) ABSTRACT

An apparatus for assembling electronics is provided, comprising a support frame, at least one pick-and-place mechanism, at least one device-engaging component, a feed device, and a programmer or tester. The pick-and-place mechanism is secured to the support frame. The device-engaging component is secured to the pick-and-place mechanism. The feed device has a slender body secured to the frame to feed a plurality of electronic devices to a feed location. The programmer or tester has a slender body secured to the support frame in a side-by-side relationship relative to the feed device. The programmer or tester has a socket located at an intermediate location. The devices are movable by the device-engaging component from the feed location to the socket at the intermediate location.

### 5 Claims, 7 Drawing Sheets

