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Montena

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(54) **FLEXIBLE RF SEAL FOR COAXIAL CABLE CONNECTOR**

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Related U.S. Application Data

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(51) **Int. Cl.**
H01R 13/52 (2006.01)
(52) **U.S. Cl.** **439/277**
(58) **Field of Classification Search** 439/277, 439/271, 583, 584, 578, 322
See application file for complete search history.

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(57) **ABSTRACT**

The present invention incorporates a flexible seal into a typical coaxial cable connector. The seal comprises a flexible brim, a transition band, and a tubular insert with an insert chamber defined within the seal. In a first embodiment the flexible brim is angled away from the insert chamber, and in a second embodiment the flexible brim is angled inward toward the insert chamber. A flange end of the seal makes a compliant contact between the port and connector faces when the nut of a connector is partially tightened, and becomes sandwiched firmly between the ground surfaces when the nut is properly tightened. The present invention allows the connector to make a uniform RF seal on a port even with a range of tightening torques.

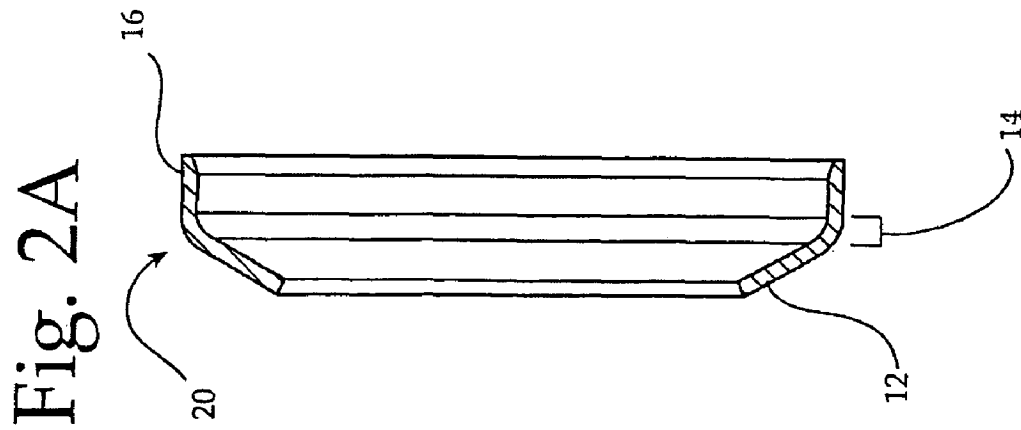**10 Claims, 4 Drawing Sheets**
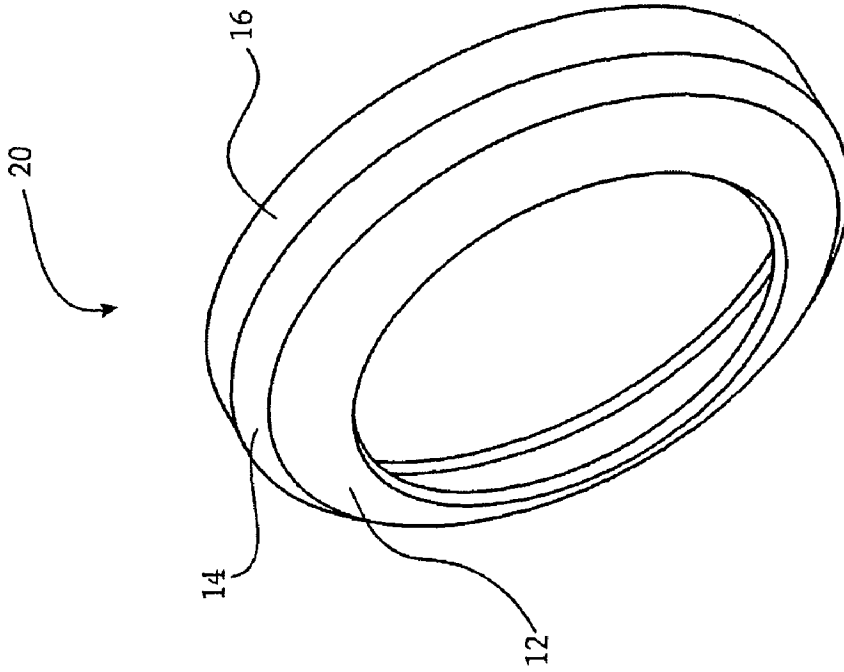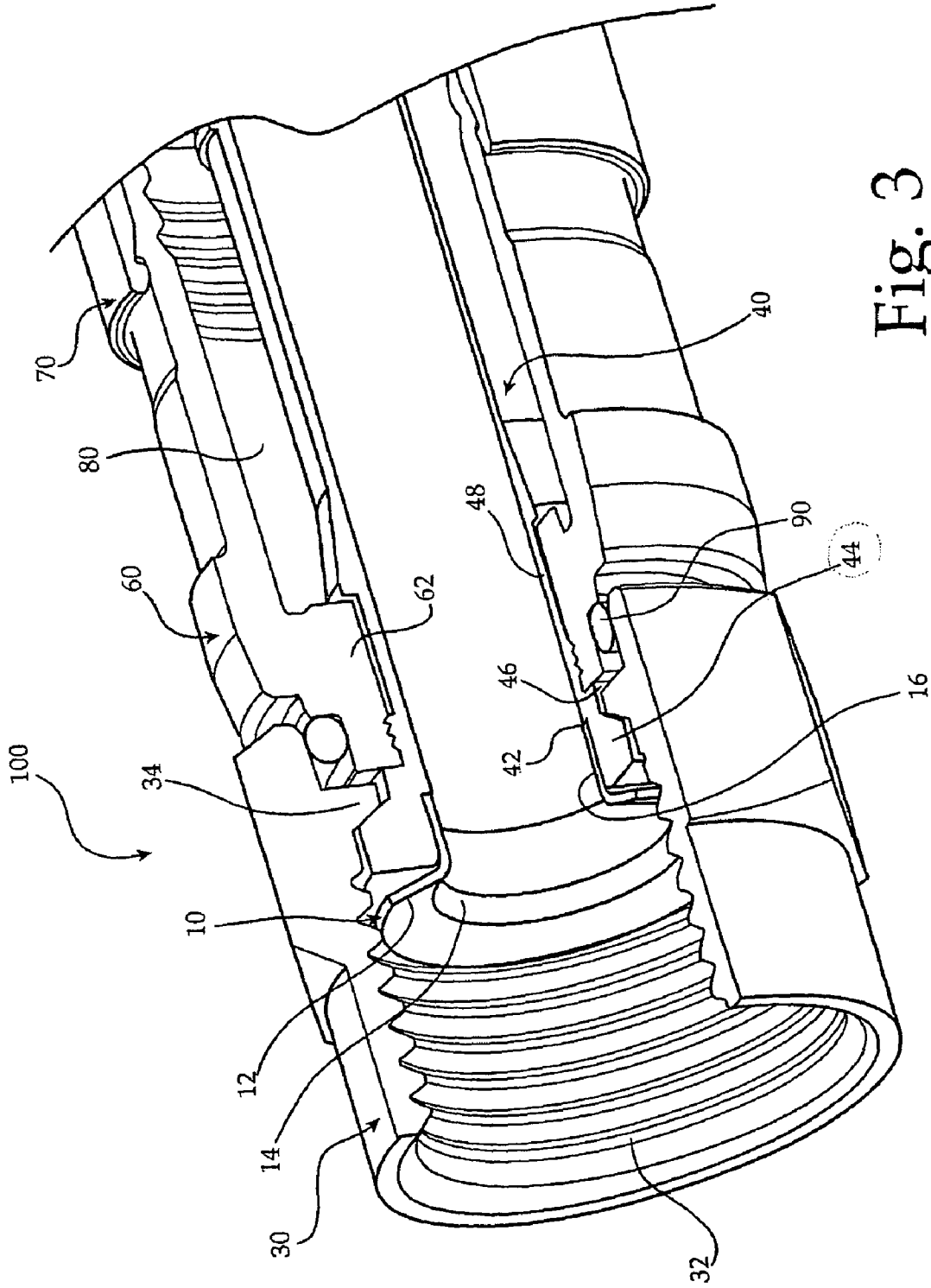
Fig. 1B
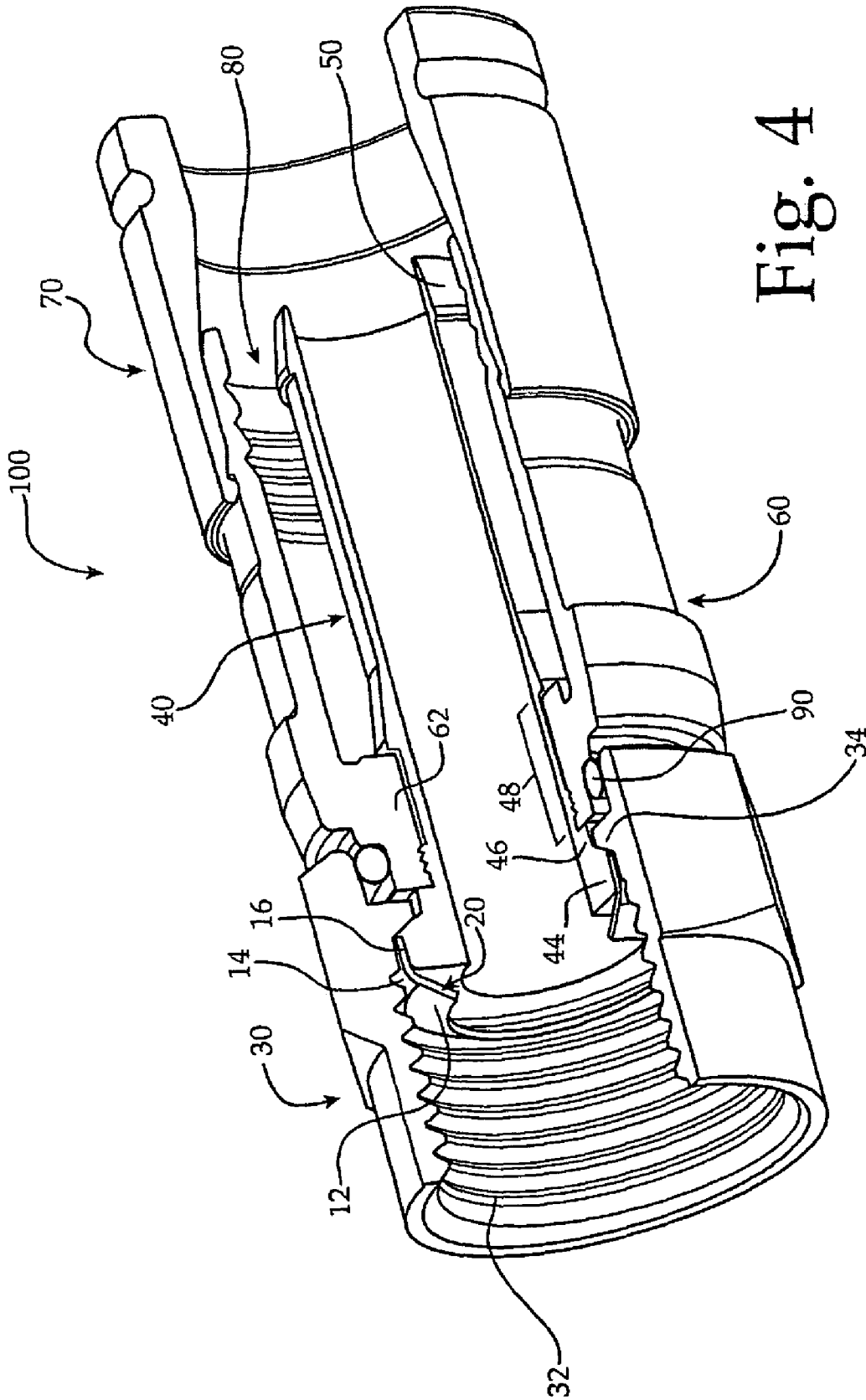

Fig. 1A

Fig. 2B

Fig. 2A

Fig. 3
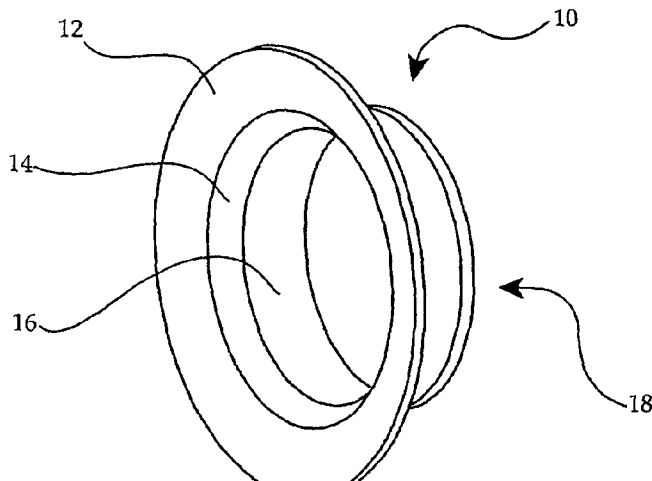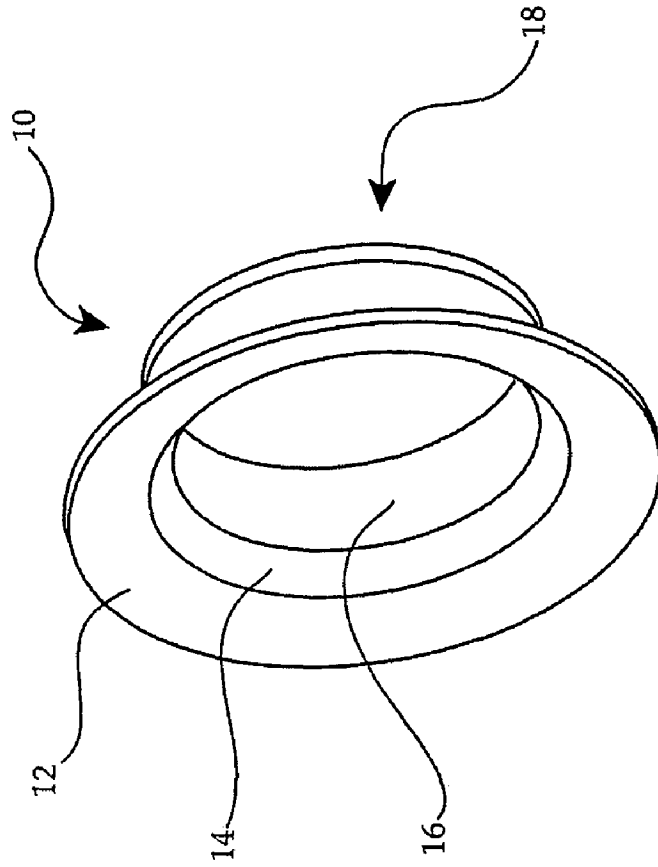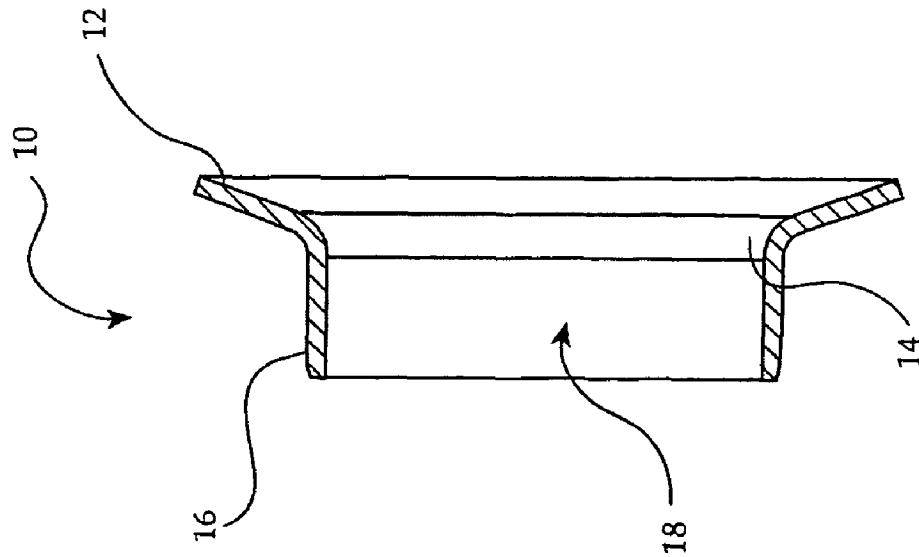
Fig. 4

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