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Burris et al.

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(54) **INTEGRALLY CONDUCTIVE LOCKING
COAXIAL CONNECTOR**

(75) Inventors: **Donald Andrew Burris**, Peoria, AZ
(US); **William Bernard Lutz**, Glendale,
AZ (US)

(73) Assignee: **Corning Gilbert Inc.**, Glendale, AZ
(US)

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patent is extended or adjusted under 35
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(51) **Int. Cl.**
H01R 9/05 (2006.01)

(52) **U.S. Cl.**
USPC **439/578**

(58) **Field of Classification Search**
USPC 439/578, 584, 583
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,655,159 A * 4/1987 McMills 116/212
5,052,947 A 10/1991 Brodie et al. 439/607
5,055,060 A 10/1991 Down et al. 439/304
5,137,470 A * 8/1992 Doles 439/578

5,154,636 A *	10/1992	Vaccaro et al.	439/583
5,183,417 A	2/1993	Bools	439/610
5,389,005 A	2/1995	Kodama	439/272
5,449,296 A *	9/1995	Jacobsen et al.	439/322
5,456,614 A *	10/1995	Szegda	439/321
5,735,704 A	4/1998	Anthony	439/271
5,975,951 A *	11/1999	Burris et al.	439/585
6,406,330 B2	6/2002	Bruce	439/609
6,716,062 B1	4/2004	Palinkas et al.	439/578
6,783,394 B1 *	8/2004	Holliday	439/578
6,805,584 B1	10/2004	Chen	439/578
6,929,508 B1	8/2005	Holland	439/579
7,029,326 B2	4/2006	Montena	439/585
7,070,447 B1	7/2006	Montena	439/578
7,086,897 B2	8/2006	Montena	439/578
7,114,990 B2	10/2006	Bence et al.	439/583
7,131,868 B2	11/2006	Montena	439/578
7,156,696 B1	1/2007	Montena	439/584
7,229,303 B2	6/2007	Vermoesen et al.	439/271
7,299,550 B2	11/2007	Montena	29/857
7,479,035 B2	1/2009	Bence et al.	439/583
7,607,942 B1	10/2009	Van Swearingen	439/578

(Continued)

OTHER PUBLICATIONS

US Department of the Army Tech Manual TM 9-1819AC, pp. 284-
285, Dec. 1952.

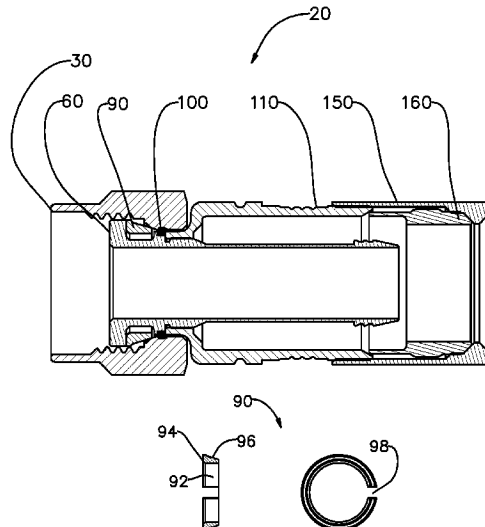
(Continued)

Primary Examiner — Neil Abrams
Assistant Examiner — Travis Chambers

(57) **ABSTRACT**

The coaxial connector has a coupling nut, a post, a hollow
body, and a ring that prevents interfaces from gapping and
provide a robust alternative ground path that also RF shields
the connector from both ingress and egress. The ring is biased
radially outward to engage the coupling nut, thereby biasing
the coupling nut in a rearward direction and, at the same time,
biasing the post in a forward direction to engage a terminal.

10 Claims, 6 Drawing Sheets



PPC Exhibit 2017
Corning v. PPC
IPR2016-01573

(56)

References Cited

U.S. PATENT DOCUMENTS

7,674,132 B1 3/2010 Chen 439/578
7,753,705 B2* 7/2010 Montana 439/277
7,811,133 B2 10/2010 Gray 439/607.41
7,833,053 B2* 11/2010 Mathews 439/578
7,857,661 B1 12/2010 Islam 439/584
7,892,005 B2* 2/2011 Haube 439/321
7,892,024 B1 2/2011 Chen 439/578
7,927,135 B1 4/2011 Wlos 439/584
8,025,518 B2* 9/2011 Burris et al. 439/322
8,172,612 B2 5/2012 Bence et al. 439/578
8,376,769 B2* 2/2013 Holland et al. 439/322

2006/0166552 A1 7/2006 Bence et al. 439/578
2008/0102696 A1 5/2008 Montana 439/578
2009/0203256 A1 8/2009 Mathews 439/583
2011/0021072 A1* 1/2011 Purdy 439/578
2011/0117774 A1* 5/2011 Malloy et al. 439/578
2011/0117776 A1* 5/2011 Burris et al. 439/578

OTHER PUBLICATIONS

US Department of the Army Tech Manual TM 9-8024, pp. 418-419, Oct. 1955.
PCT International Product Brochure, HFC Network Division Connectors, 2005-2009, pp. 1-12.

* cited by examiner

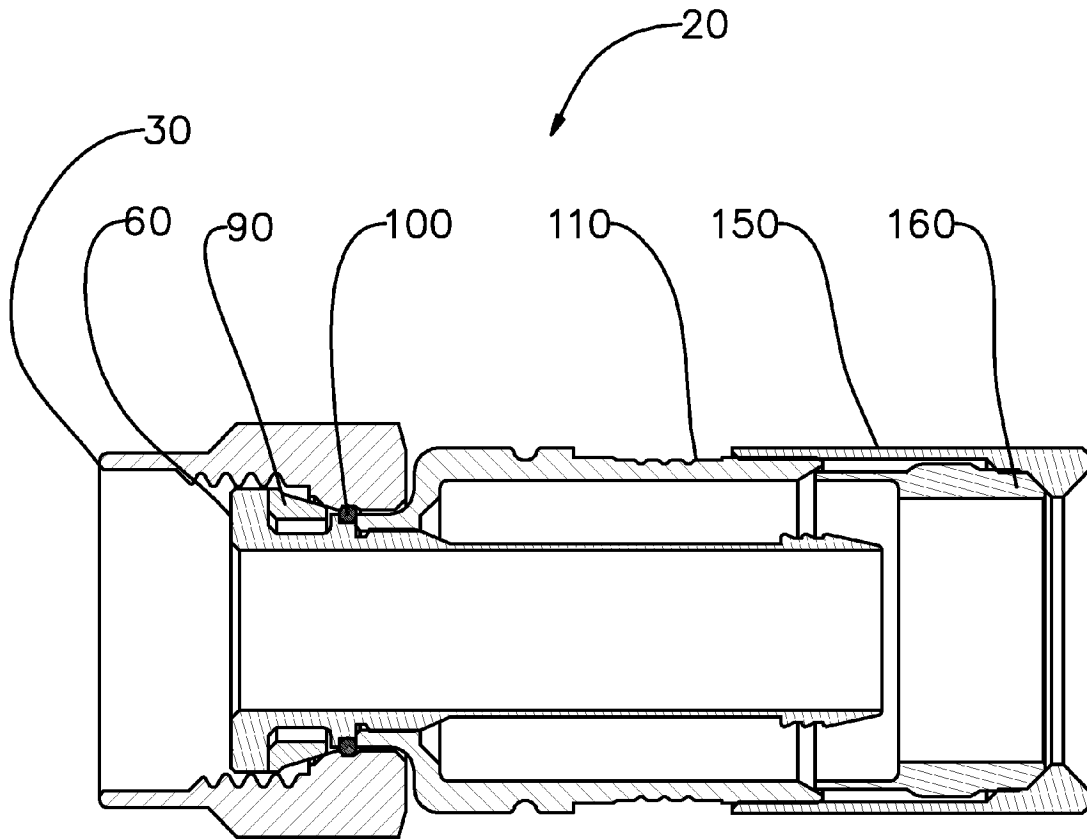
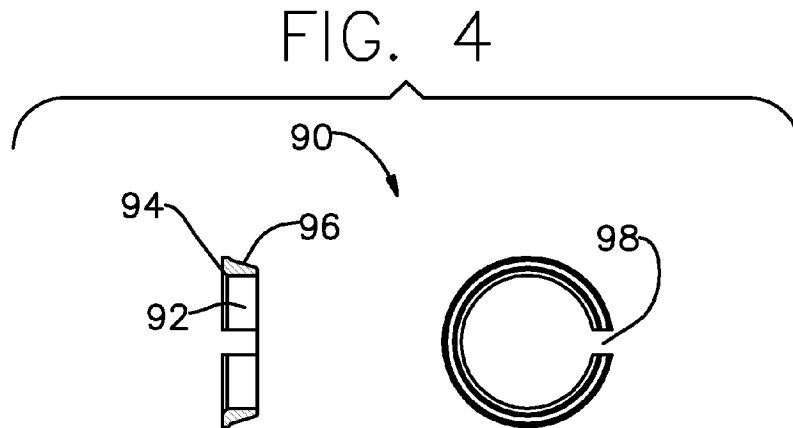
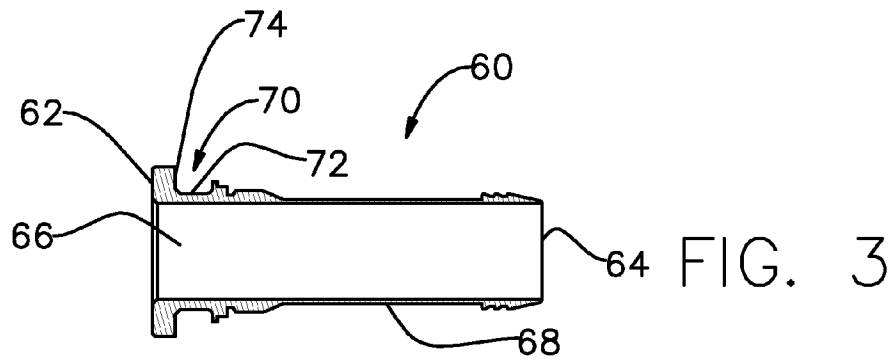
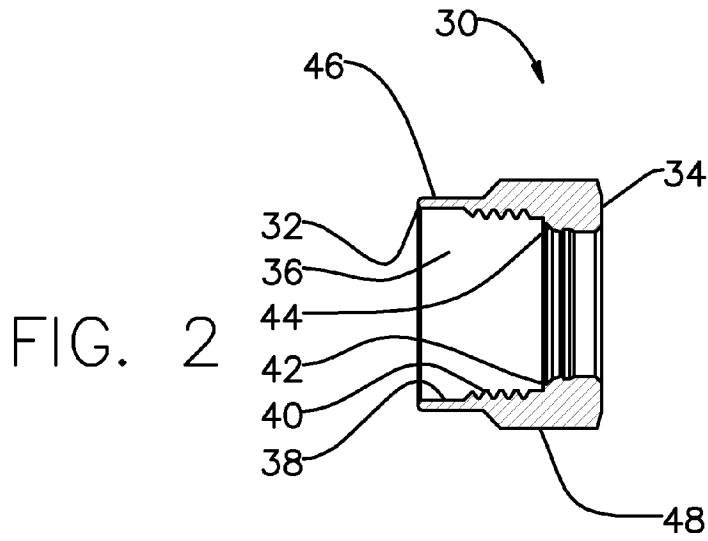


FIG. 1



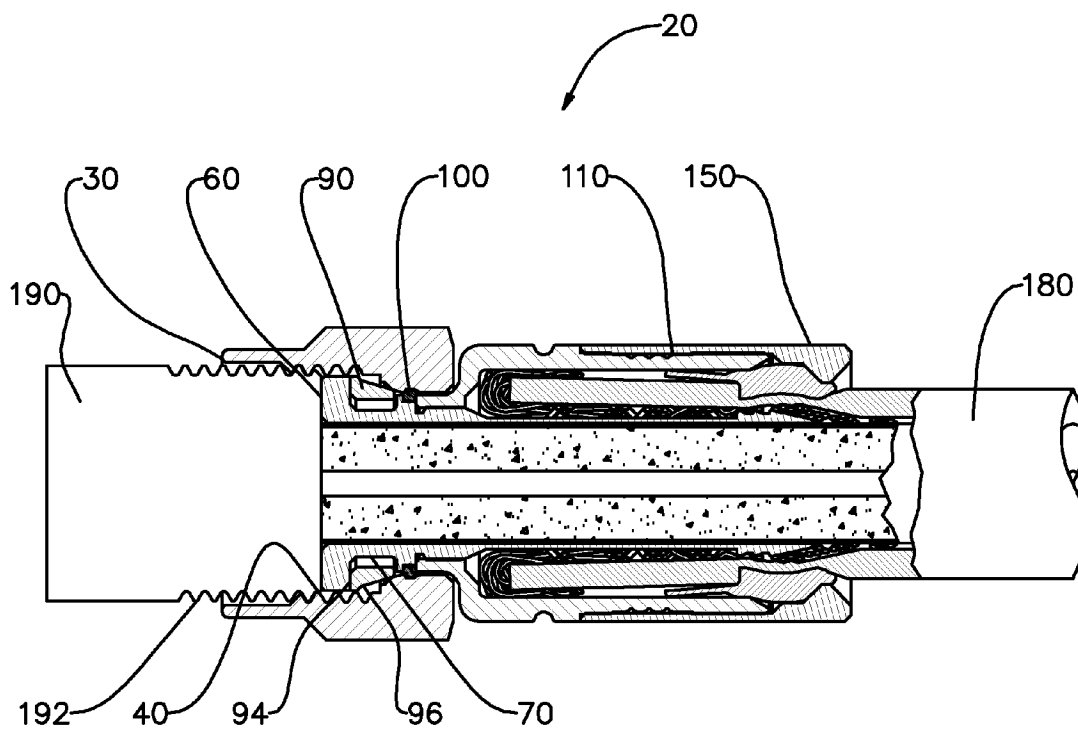


FIG. 5

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