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Burris et al.

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

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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.

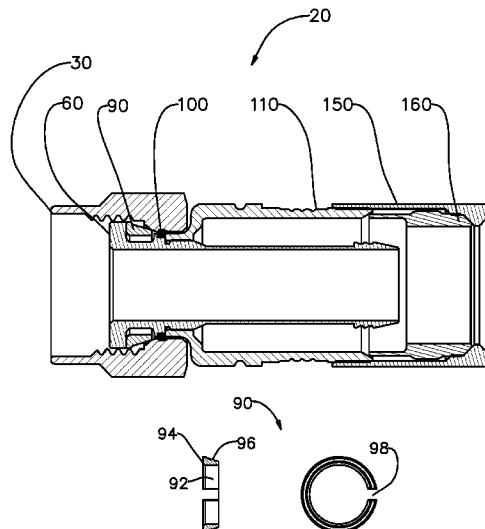
(Continued)

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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
IPR2016-01569

(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

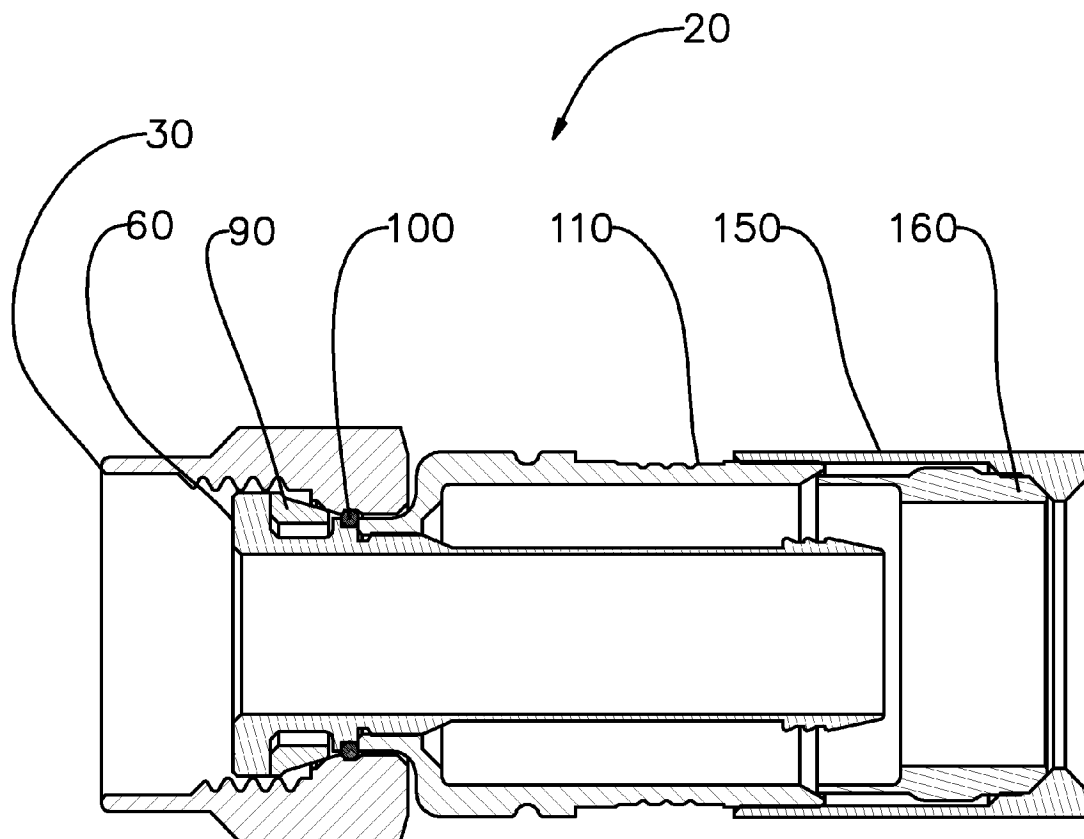
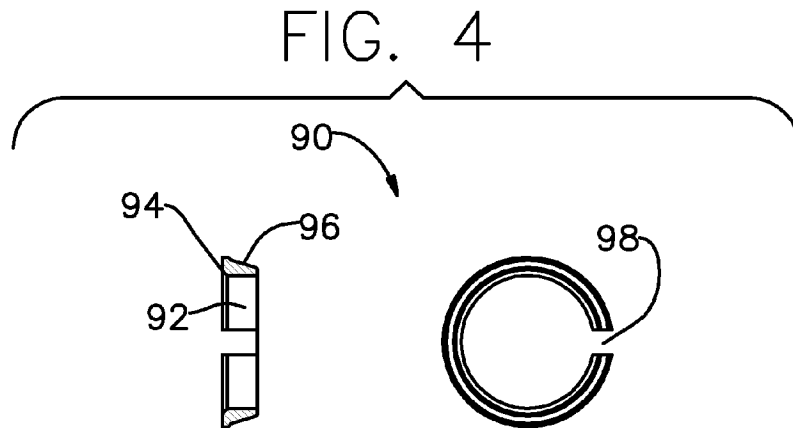
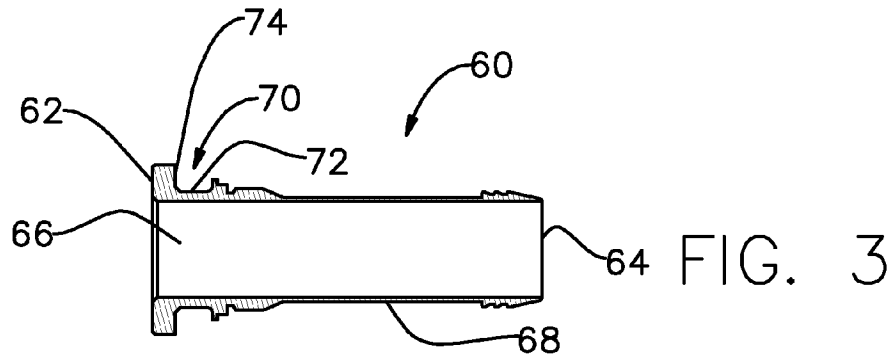
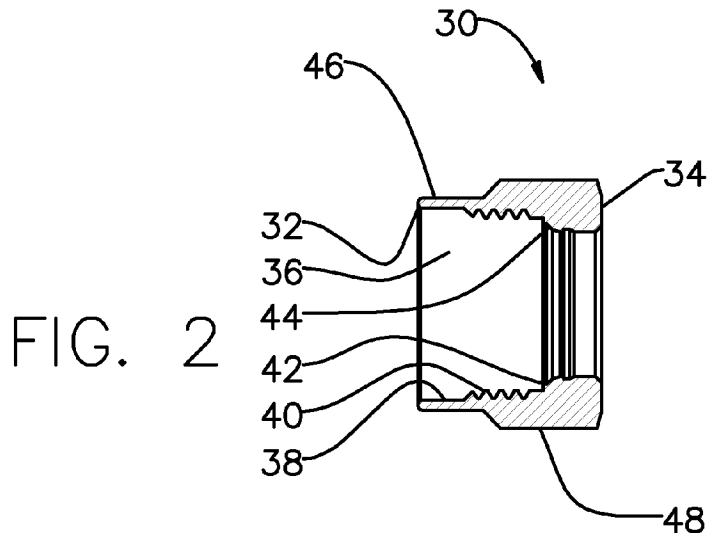


FIG. 1



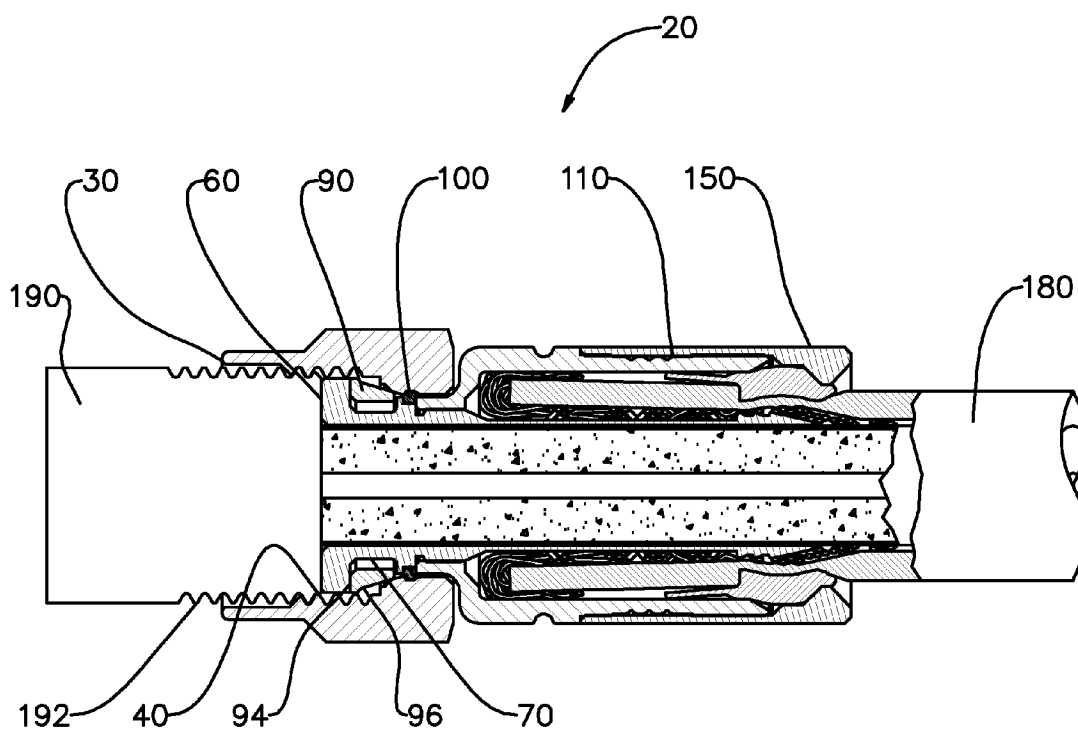


FIG. 5

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