

(12) **United States Patent**
Youtsey

(10) **Patent No.:** **US 6,712,631 B1**
(45) **Date of Patent:** **Mar. 30, 2004**

(54) **INTERNALLY LOCKING COAXIAL CONNECTOR**

(76) Inventor: **Timothy L. Youtsey**, 1715 W. Sunrise Blvd., Gilbert, AZ (US) 85233

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **10/309,216**

(22) Filed: **Dec. 4, 2002**

(51) Int. Cl.⁷ **H01R 13/62**

(52) U.S. Cl. **439/322; 439/581**

(58) Field of Search 439/312, 313, 439/321, 320, 322, 319, 581; 285/33, 900, 921

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,390,374 A 6/1968 Forney, Jr.
3,601,776 A * 8/1971 Curl 439/675
3,671,922 A * 6/1972 Zerlin et al. 439/352
3,778,535 A 12/1973 Forney, Jr. 174/74 C
4,307,926 A * 12/1981 Smith 439/610
RE31,995 E * 10/1985 Ball 439/488

4,915,651 A 4/1990 Bout 439/578
5,141,448 A * 8/1992 Mattingly et al. 439/314
5,195,905 A 3/1993 Pesci 439/352
5,205,547 A * 4/1993 Mattingly 267/158
5,548,088 A 8/1996 Gray et al. 174/74 R
5,564,938 A 10/1996 Shenkal et al. 439/301
5,595,499 A 1/1997 Zander et al. 439/352
5,607,325 A 3/1997 Toma 439/578
5,651,698 A 7/1997 Locati et al. 439/578
5,938,465 A 8/1999 Fox, Sr. 439/350
6,010,349 A 1/2000 Porter, Jr. 439/320
6,468,100 B1 * 10/2002 Meyer et al. 439/320

* cited by examiner

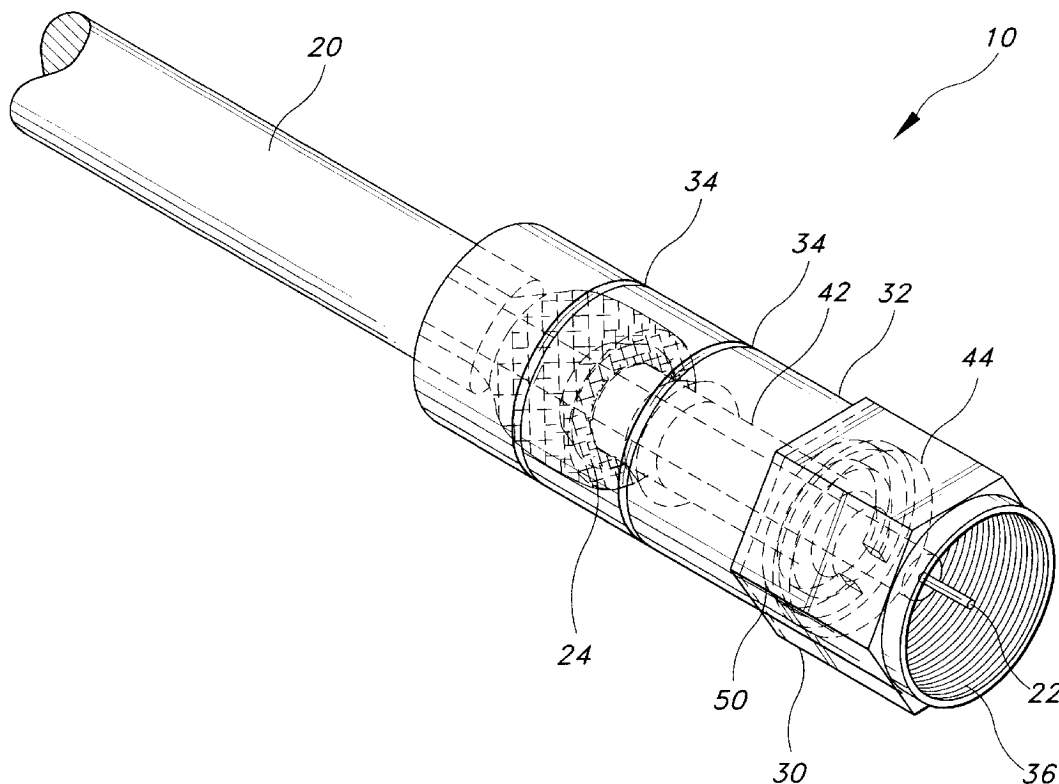
Primary Examiner—Tulsidas Patel

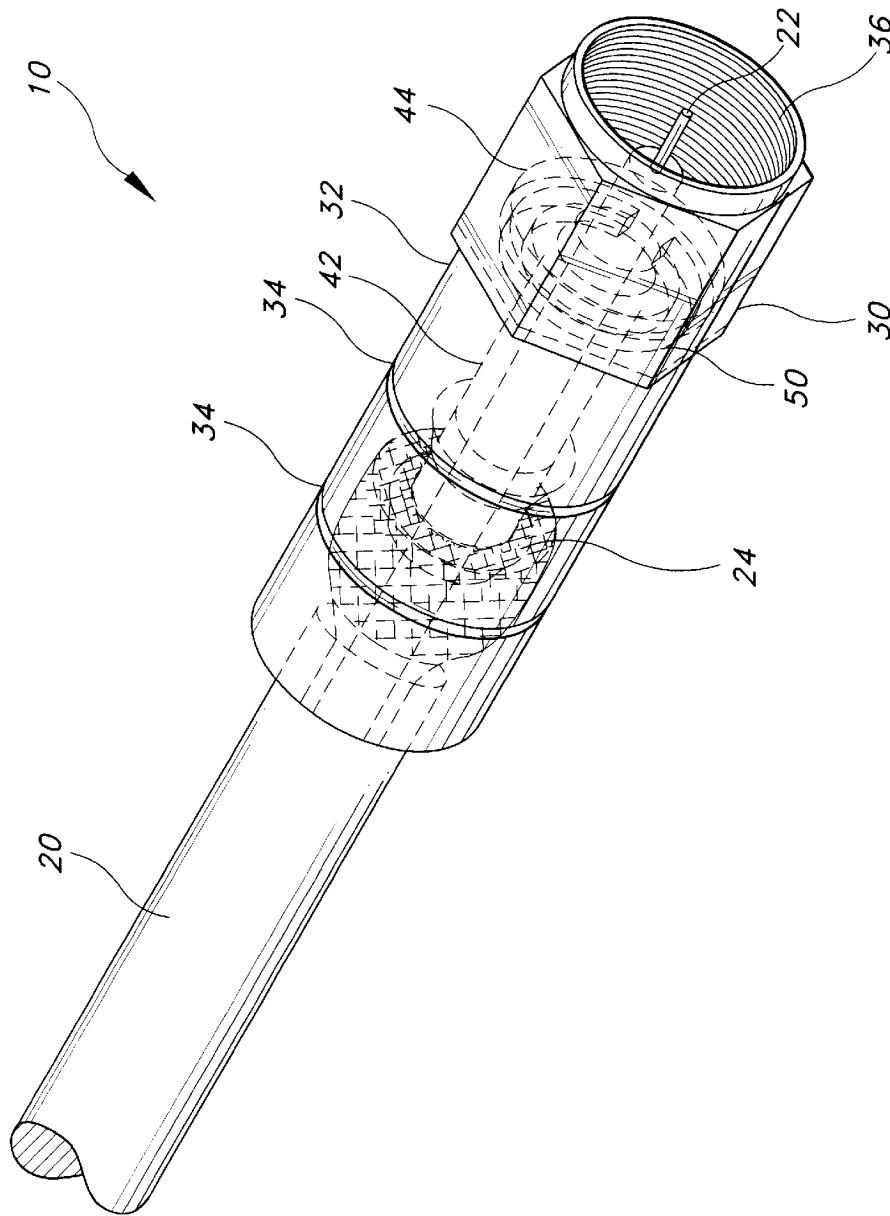
(74) *Attorney, Agent, or Firm*—Richard C. Litman

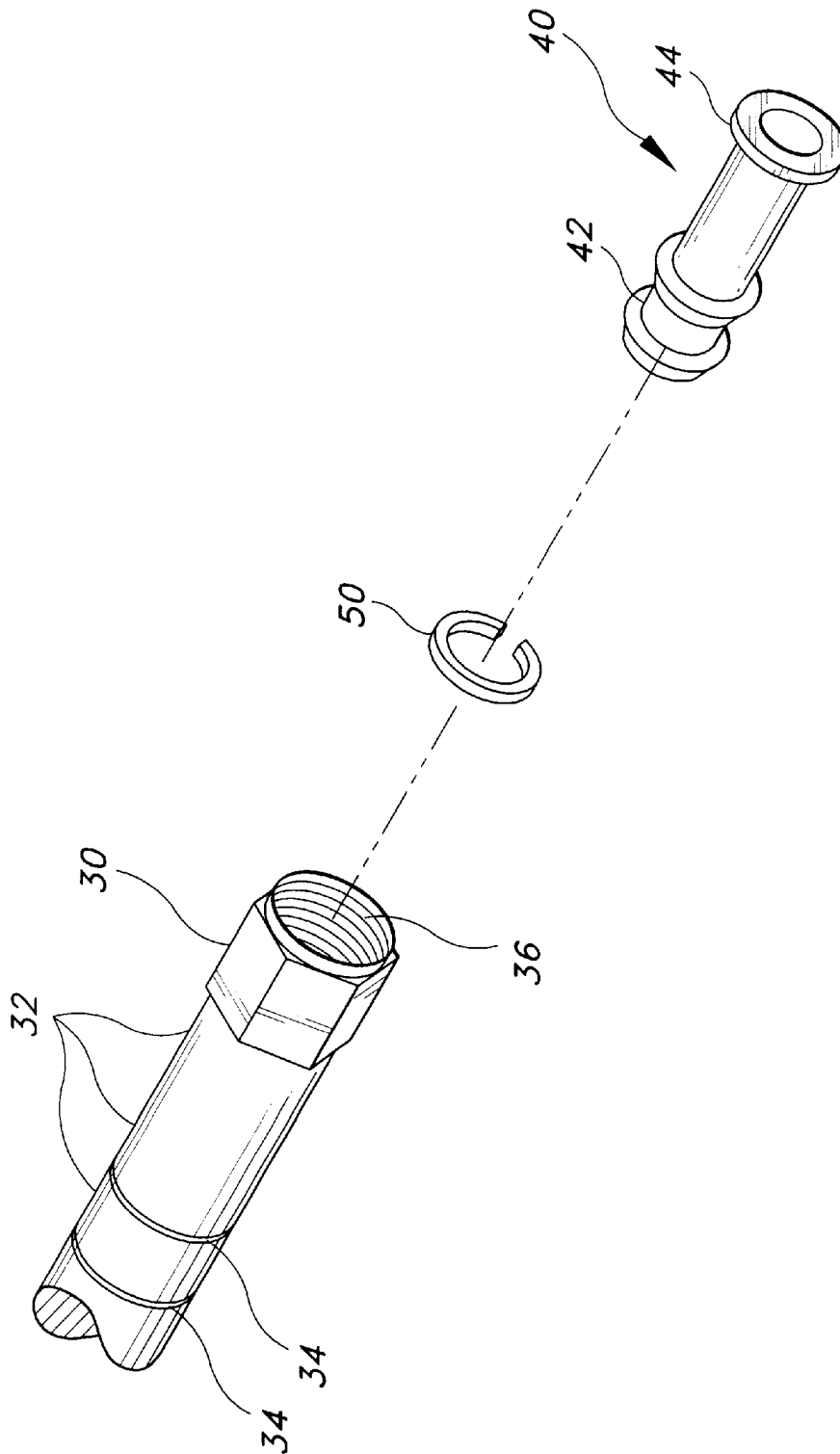
(57) **ABSTRACT**

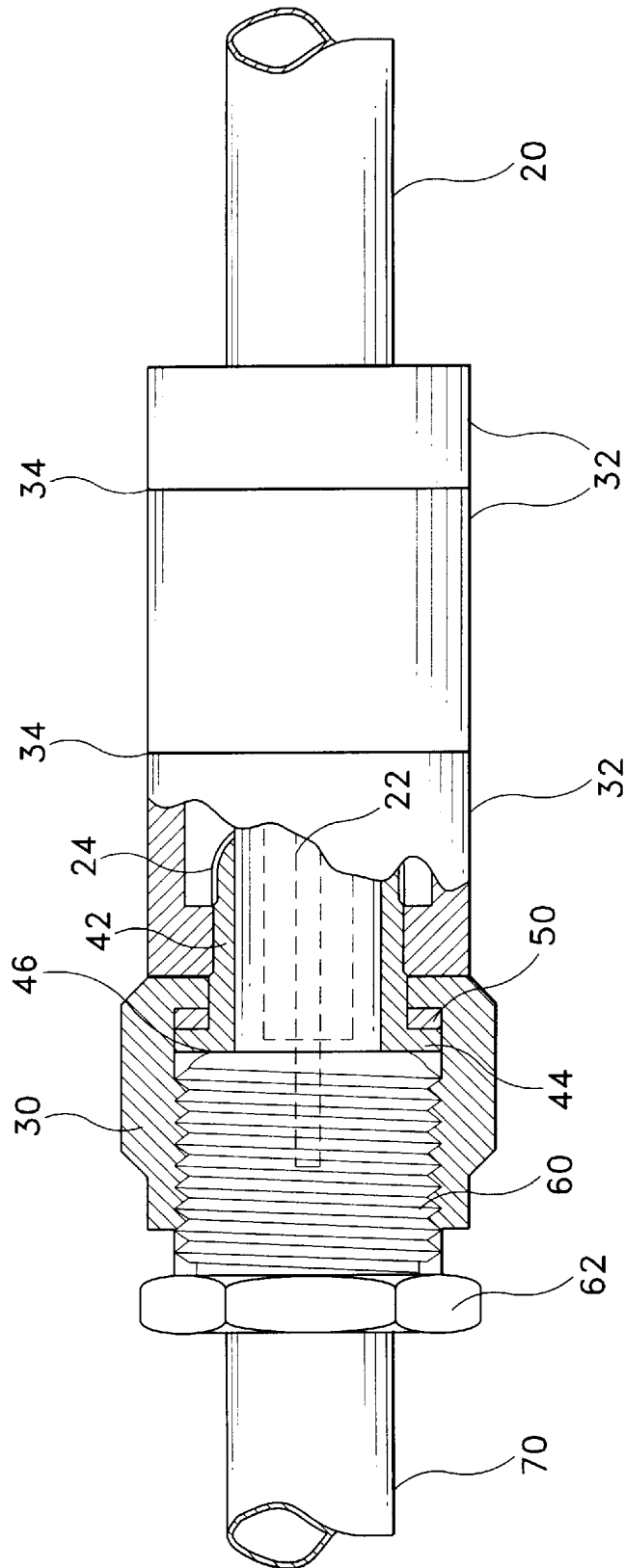
The internally locking coaxial connector has a conductive insert disposed in an outer body. The insert has a front flange and a lock washer placed between the front flange and an inwardly extending annular flange at the rear of a coupling nut slidable on the outer body. When a male connector is mated with the female connector, the lock washer applies a continuous tension between the male and female connectors to prevent their separation when exposed to vibration or thermal cycling.

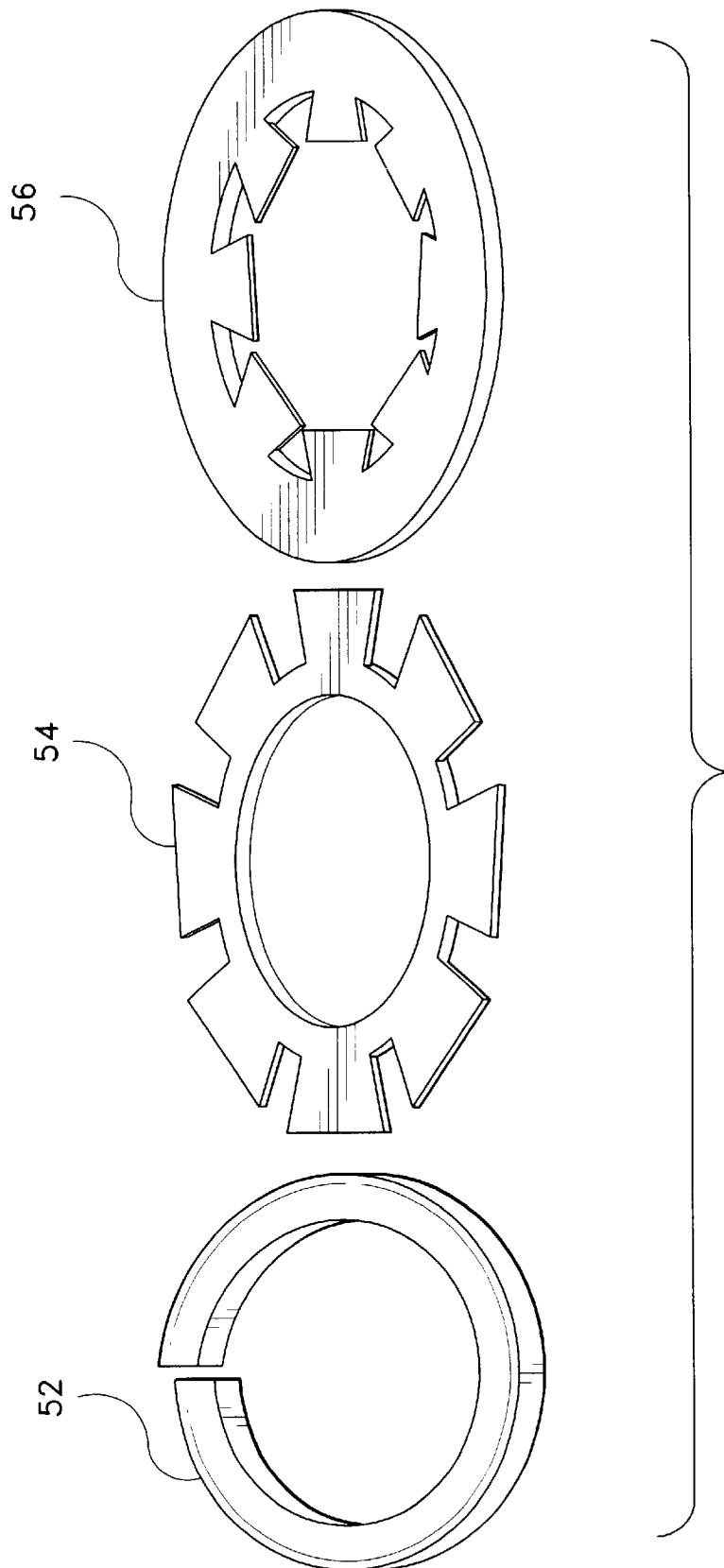
5 Claims, 4 Drawing Sheets



*Fig. 1*

*Fig. 2*

*Fig. 3*

*Fig. 4*

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.