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# (12) United States Patent Miller

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### (54) CONNECTOR WITH ESD INHIBITING SHELL

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patent is extended or adjusted under 35 U.S.C. 154(b) by 528 days.

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(51) **Int. Cl.** 

**H01R 13/53** (2006.01)

(52) **U.S. Cl.** ...... **439/181**; 439/108; 439/607; 439/886

See application file for complete search history.

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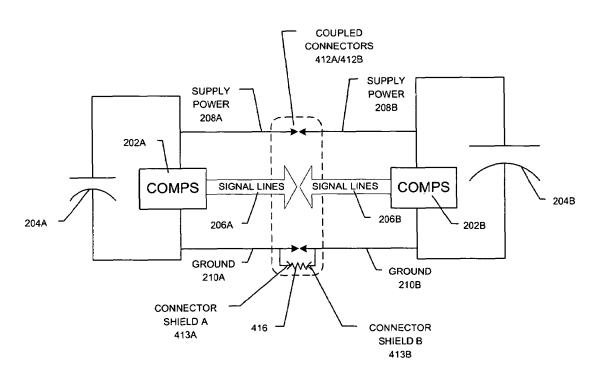
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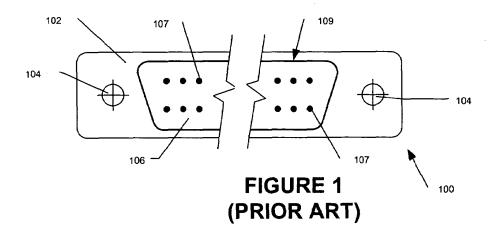
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#### (57) ABSTRACT

ESD damage caused by connecting devices that have separate grounds, is reduced by equalizing the charge on the first and second device grounds before connecting their signal lines together; but when the grounds are equalized, the transfer of charge between them is sufficiently slowed down so as to avoid harming components within the device receiving the extra charge. In one embodiment, a connector for connection with a complementary connector is provided with an inhibited shell. The inhibited shell is mounted to the connector body for connection with a shell on a complementary connector. The inhibited shell is configured (e.g., with a conductive polymer having a desired resistance) to sufficiently slow down the detrimental transfer of charge between the separate grounds on the connected devices while at the same time allowing them to equalize with one another.

#### 26 Claims, 2 Drawing Sheets





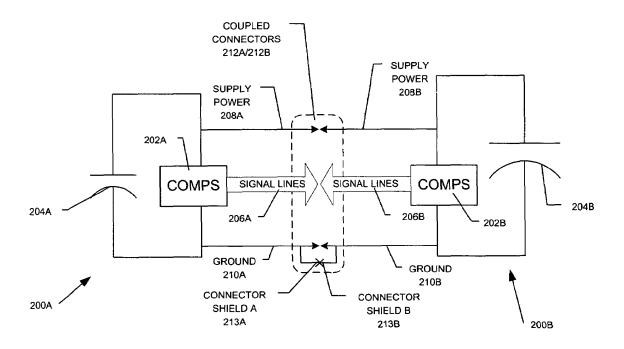


FIGURE 2 (PRIOR ART)