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Lanclos et al.

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(54) **CONNECTION CARTRIDGE FOR DOWNHOLE STRING**

361/248, 249; 102/308, 310, 311, 217,
102/218, 220, 320, 322, 202.5, 202.12,
102/202.14, 206

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See application file for complete search history.

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(57) **ABSTRACT**

A cartridge assembly for use with a perforating system having a contact terminal that connects to a perforating signal line when inserted into a receptacle end of a perforating gun. A detonator may be included in an end of the cartridge assembly for initiating a detonating cord in the perforating gun. The cartridge assembly is a modular unit that replaces the manual connections made when assembling a string of perforating guns. The cartridge assembly may optionally include a controller switch for controlling current flow through the cartridge assembly.

12 Claims, 5 Drawing Sheets

(73) Assignee: **Baker Hughes Incorporated**, Houston, TX (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 355 days.

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(65) **Prior Publication Data**

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Related U.S. Application Data

(60) Provisional application No. 61/439,217, filed on Feb. 3, 2011.

(51) **Int. Cl.**

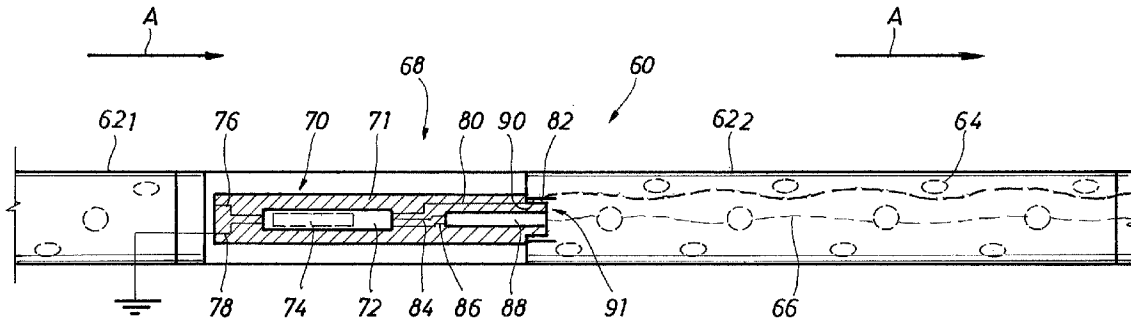
E21B 43/1185 (2006.01)
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(52) **U.S. Cl.**

CPC **E21B 43/1185** (2013.01); **F42D 1/05** (2013.01); **E21B 43/117** (2013.01); **E21B 47/12** (2013.01)

(58) **Field of Classification Search**

CPC **E21B 43/1185**; **E21B 43/117**; **F42D 1/05**; **F42D 1/055**
USPC 166/298, 55, 65.1; 175/2, 4.55; 89/1.15;



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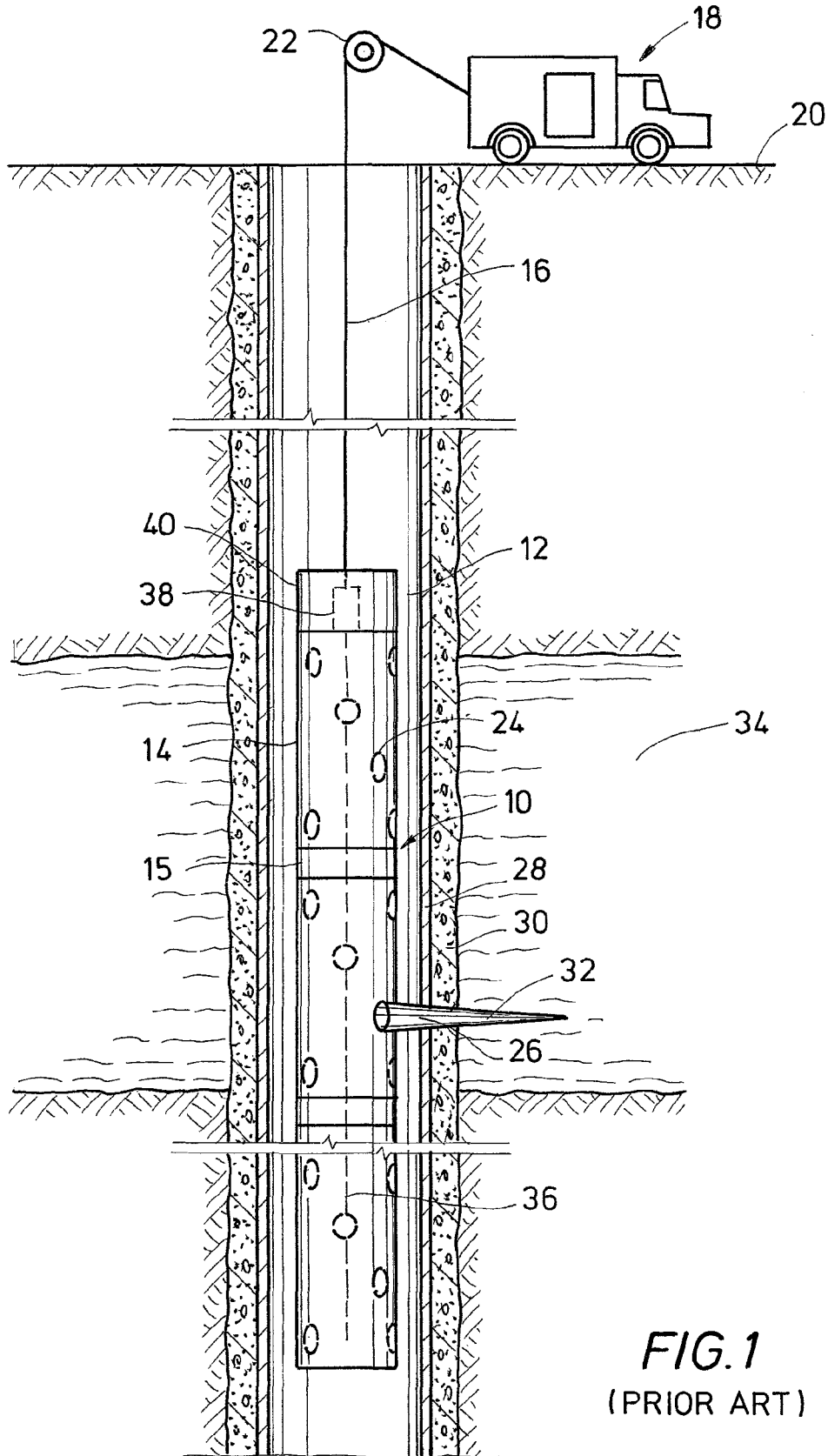


FIG. 1
(PRIOR ART)

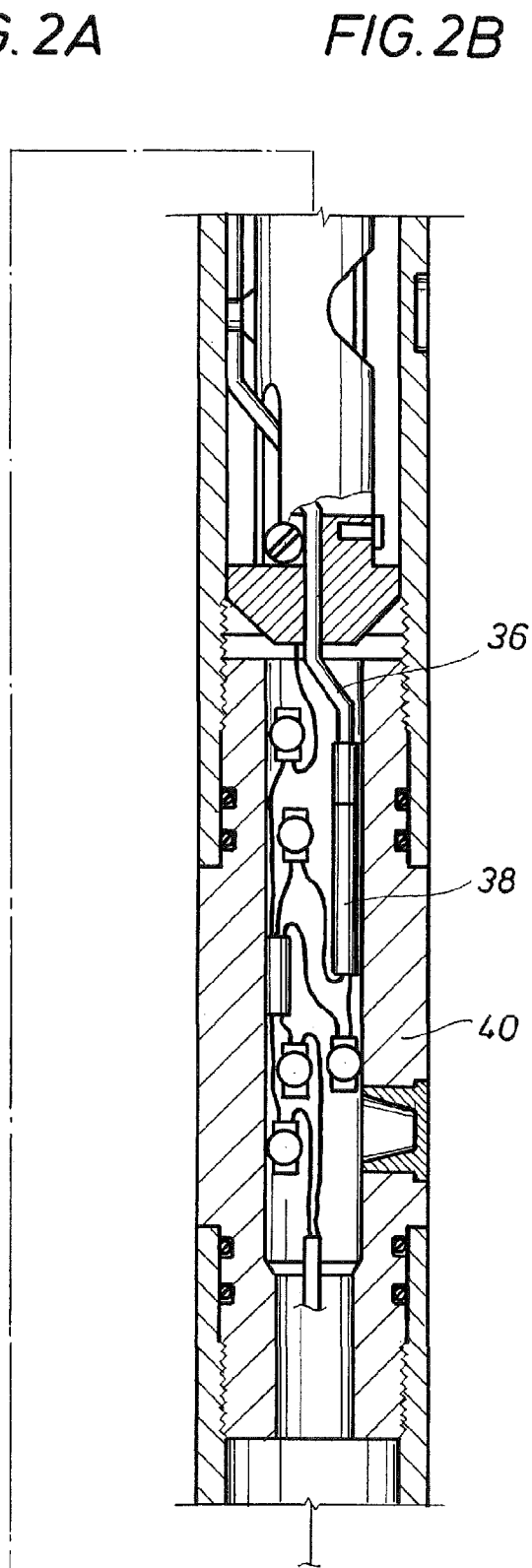
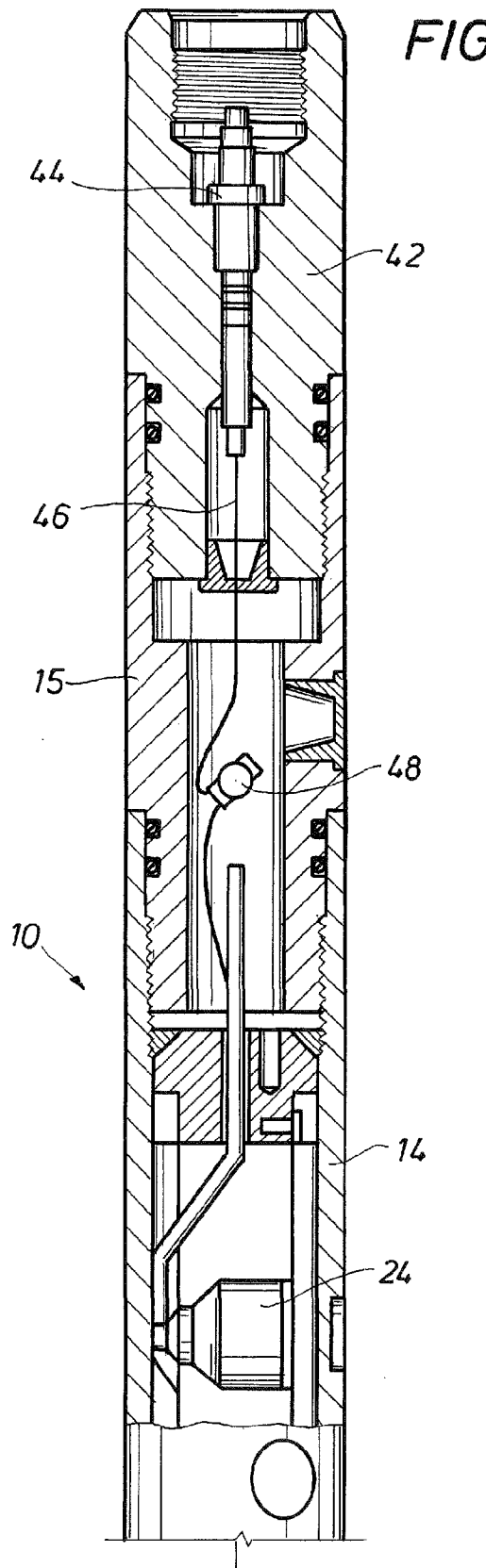


FIG. 2C

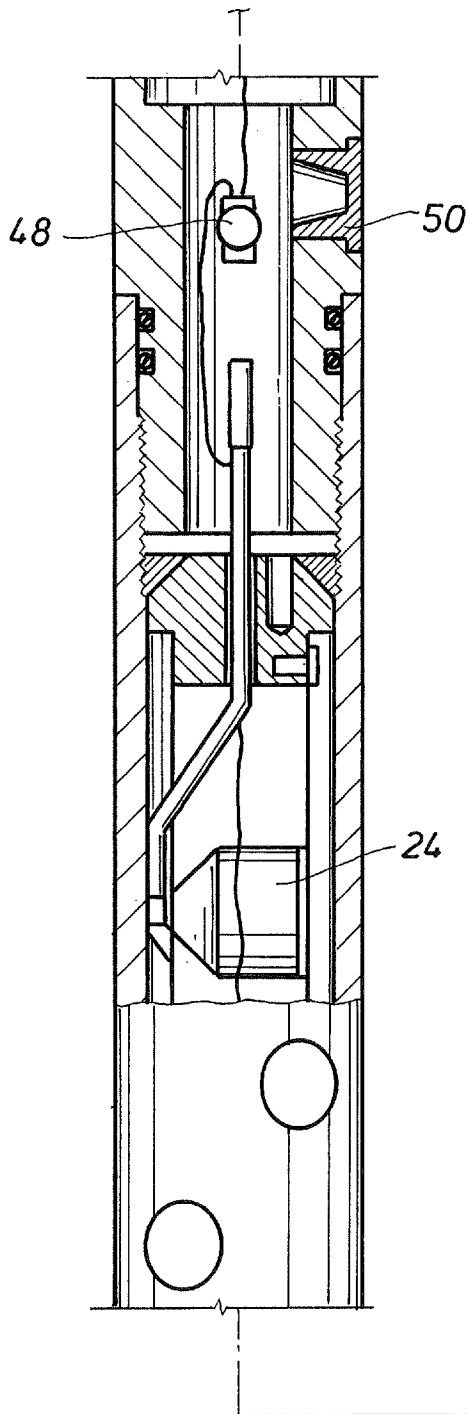
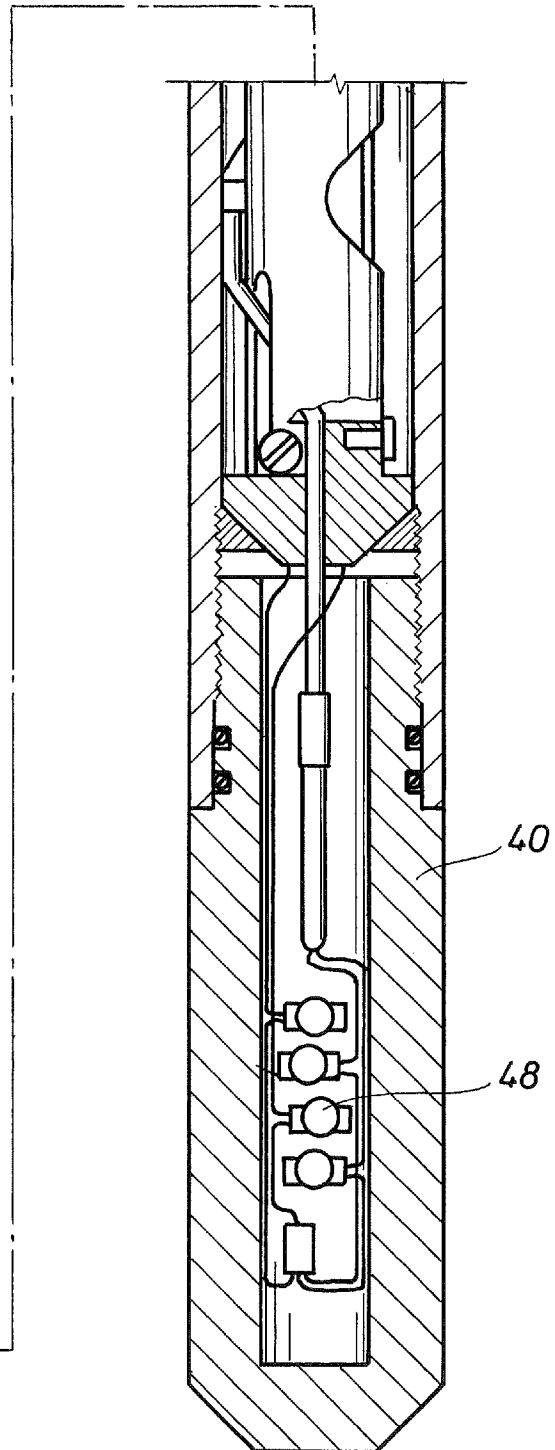


FIG. 2D



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