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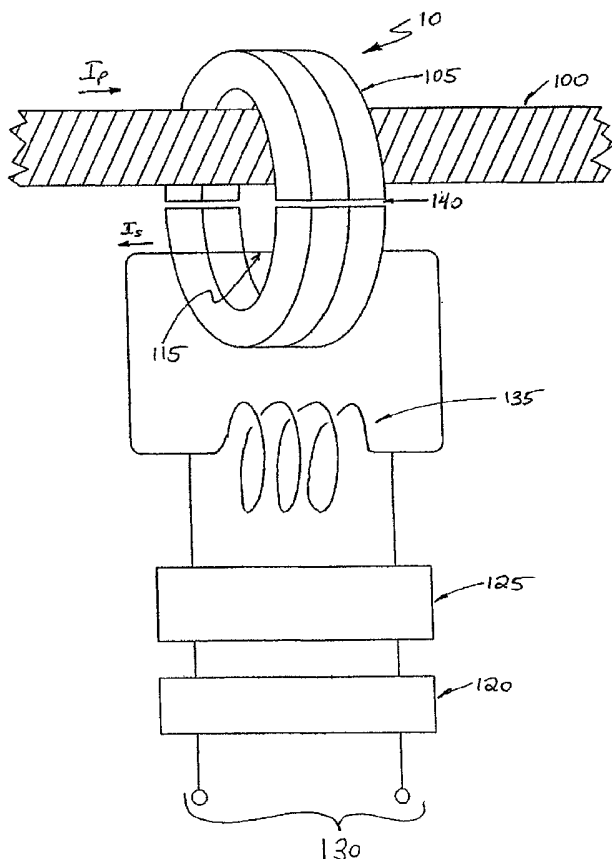
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(54) Title: HIGH CURRENT INDUCTIVE COUPLER AND CURRENT TRANSFORMER FOR POWER LINES



(57) Abstract: There is provided an inductive power line data coupler (10). The coupler (10) includes (a) a magnetic core (105) having a high magnetic permeability at a data communication frequency and being configured to allow a power line (100) to serve as a primary winding, (b) a data signaling circuit that provides a secondary winding (115) through the magnetic core (105) for coupling a data signal between the power line (100) and a communication device (130), and (c) a choke coil (135) coupled to the data signaling circuit for creating a flux-canceling power frequency current opposite in direction and comparable in magnitude to a power frequency current. The coupler (10) may also include a circuit for sensing a level of current in the power line (100).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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 IPC(7) : H04M 11/04  
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**B. FIELDS SEARCHED**  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,408,186 A (HOWELL) 04 OCTOBER 1983, COL. 4, LINES 13-44.	1-25
Y	US 4,420,752 A (DAVIS ET AL.) 13 DECEMBER 1983, COL. 6, LINES 10-58.	1-25
Y, P	US 6,529,120 A (BILENKO ET AL.) 04 MARCH 2003, COL. 2, LINES 8-35.	1-25
T, E	US 6,563,420 B2 (BROWN ET AL.) 13 MAY 2003, COL. 5, LINES 9-60.	1-25
Y	US 6,160,374 A (HAYES ET AL.) 12 DECEMBER 2000, COL. 4, LINES 15-48.	1-25

Further documents are listed in the continuation of Box C.  See patent family annex.

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