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(54) Title: SELF-SHIELDING HIGH VOLTAGE DISTRIBUTION BOX

(57) Abstract: A distribution box for enclosing an electrical connection in an electrical wiring system includes a housing that is resistive to penetration by electromagnetic fields and a plurality of electrical conductors that form the electrical connection. A mirror plate is disposed within the housing and generates mirror currents to suppress electromagnetic fields generated by current flowing through the plurality of electrical conductors.

**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US05/17593

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **H05K 9/00(2006.01)**  
  
 USPC: 361/697,702,709,730,752,752,796,797,800,816,818;174/50.51,58,60  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 361/697,702,709,730,752,752,796,797,800,816,818;174/50.51,58,60  
  
 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 5,703,754 A (HINZE) 30 December 1997 (30.12.1997), see entire document.          | 1-12                  |
| Y          | US 5,091,823 A (KANBARA et al.) 25 February 1992 (25.02.1992), see entire document. | 1-12                  |

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

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| Name and mailing address of the ISA/US<br>Mail Stop PCT, Attn: ISA/US<br>Commissioner of Patents<br>P.O. Box 1450<br>Alexandria, Virginia 22313-1450<br>Facsimile No. (571) 273-3201 | Authorized officer <i>Rhonda J. Reed</i><br><b>KAMMIE CUNEO</b><br>Telephone No. 571-272-0000 |