



- [54] **SYSTEM AND METHOD FOR VOLTAGE SWITCHING TO SUPPLY VARIOUS VOLTAGES AND POWER LEVELS TO A PERIPHERAL DEVICE**
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- [73] Assignee: **International Business Machines Corporation**, Armonk, N.Y.
- [21] Appl. No.: **842,695**
- [22] Filed: **Apr. 15, 1997**
- [51] Int. Cl.⁶ **G06F 1/26**
- [52] U.S. Cl. **395/750.01; 395/750.02; 364/492**
- [58] Field of Search 395/750.01, 750.03, 395/750.07, 750.06; 364/707, 492

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 Wright, M., Ed., "USB and IEEE 1394: Pretenders, Contenders, or Locks for Ubiquitous Desktop Deployment?" *EDN*, Apr. 25, 1996, pp. 79-91.

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Attorney, Agent, or Firm—John D. Flynn; Winstead, Sechrest & Minick, PC

[57] **ABSTRACT**

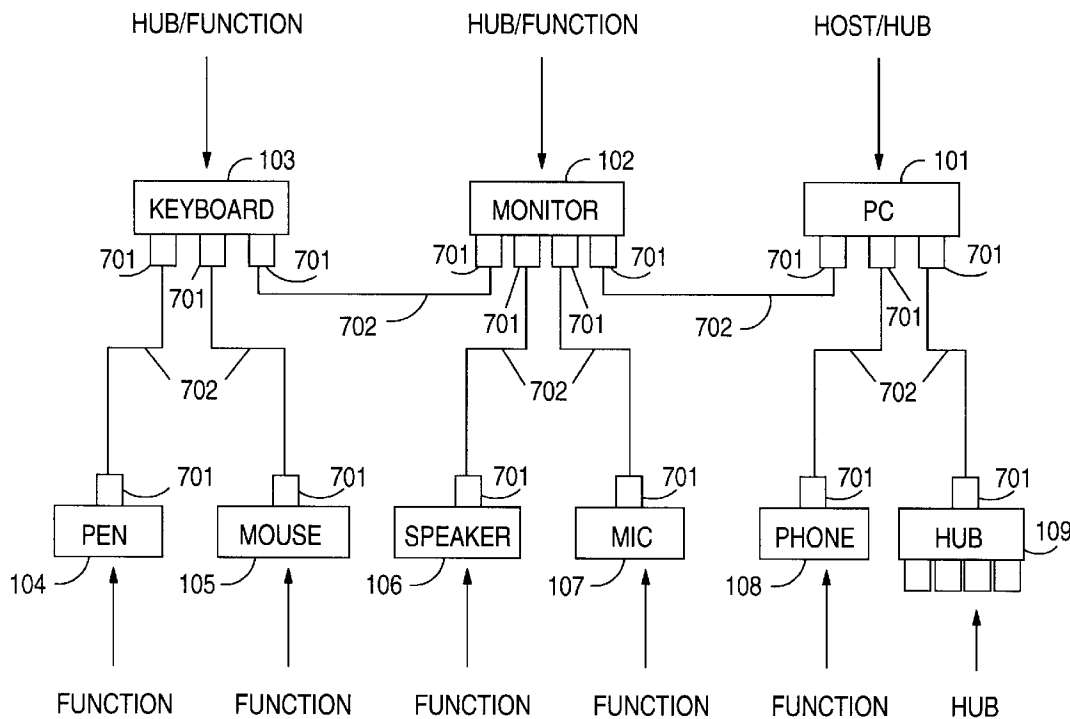
Within a data processing system, such as a personal computer, non-standard, or auxiliary, voltage and current may be supplied to an attached peripheral device along with standard Universal Standard Bus (USB) power and signaling. A communication protocol is enabled between the host system and the peripheral device to permit the peripheral device to communicate its power requirements to the host device so that the host device can switch the proper voltage and current through the USB cable to the peripheral device. This allows the peripheral device to obtain power without having to connect to an AC power supply.

21 Claims, 9 Drawing Sheets

[56] **References Cited**

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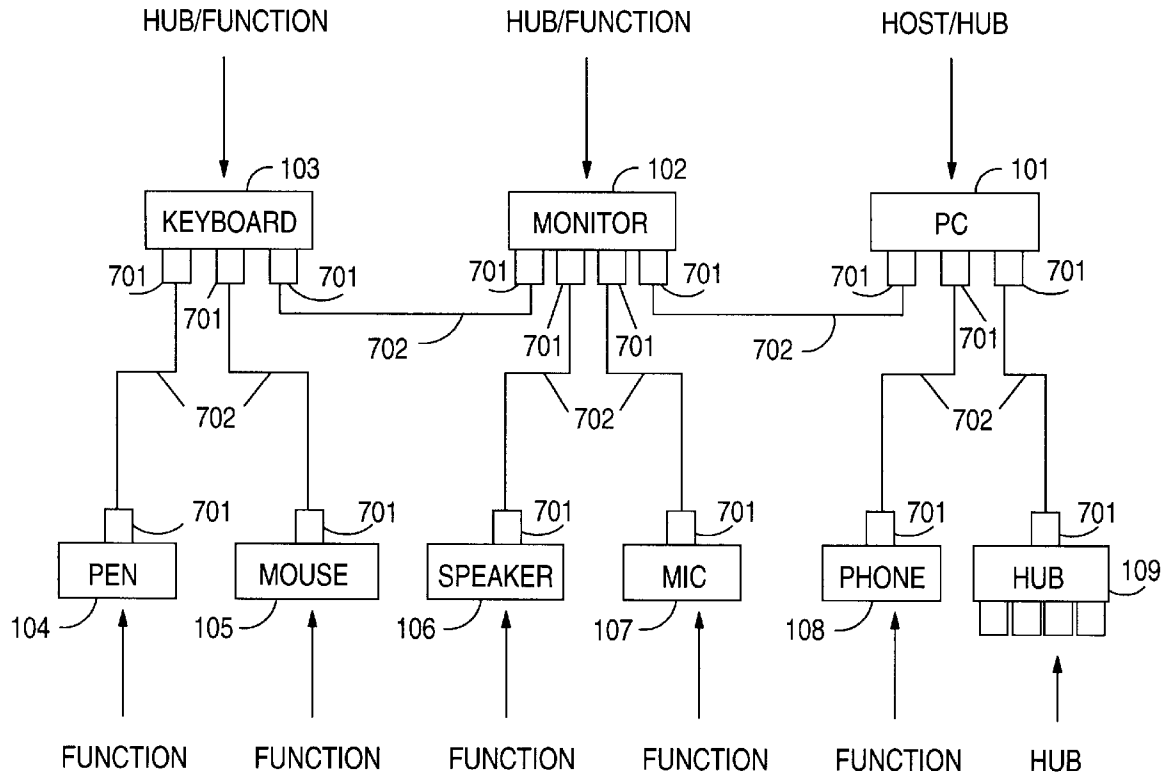


FIG. 1

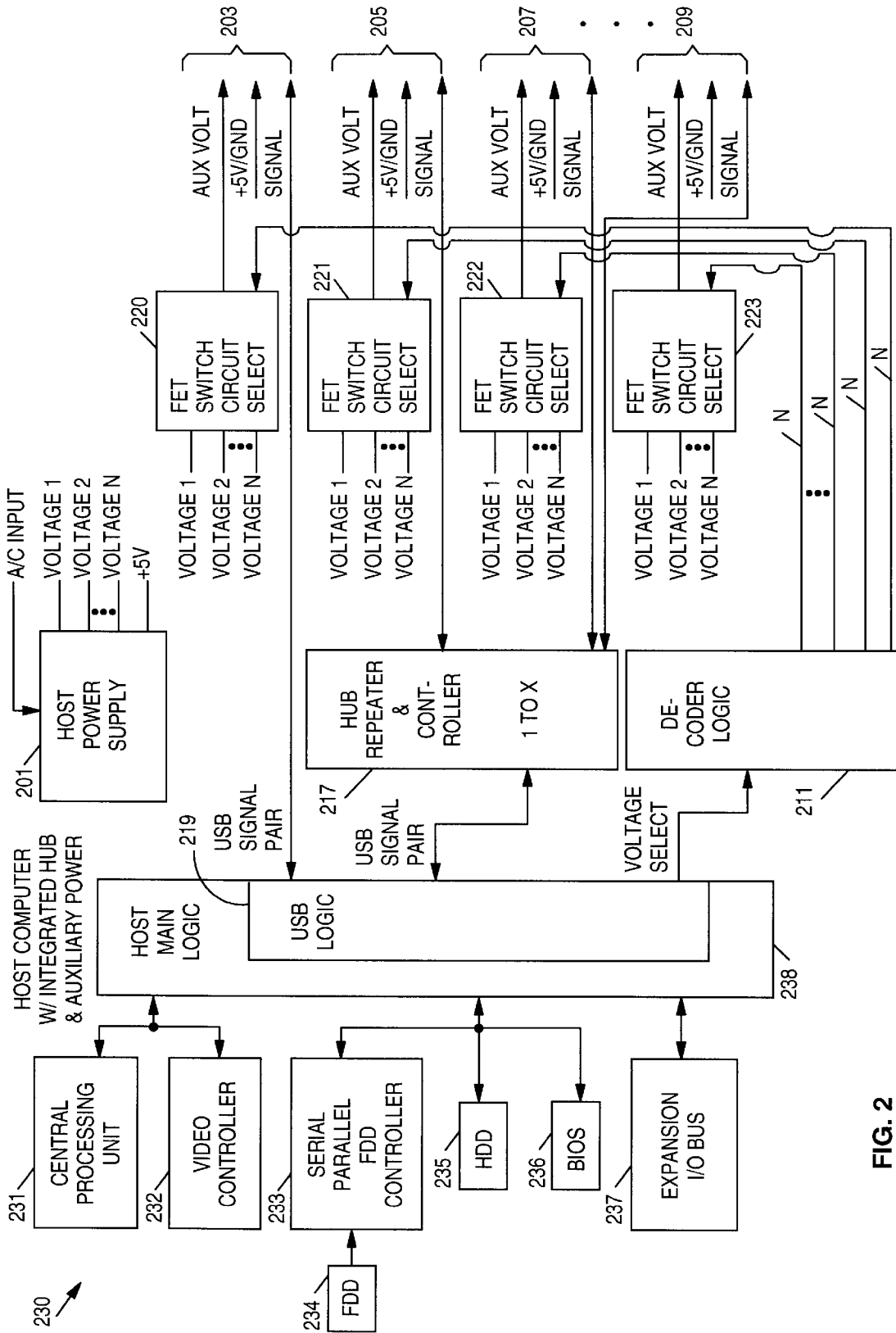


FIG. 2

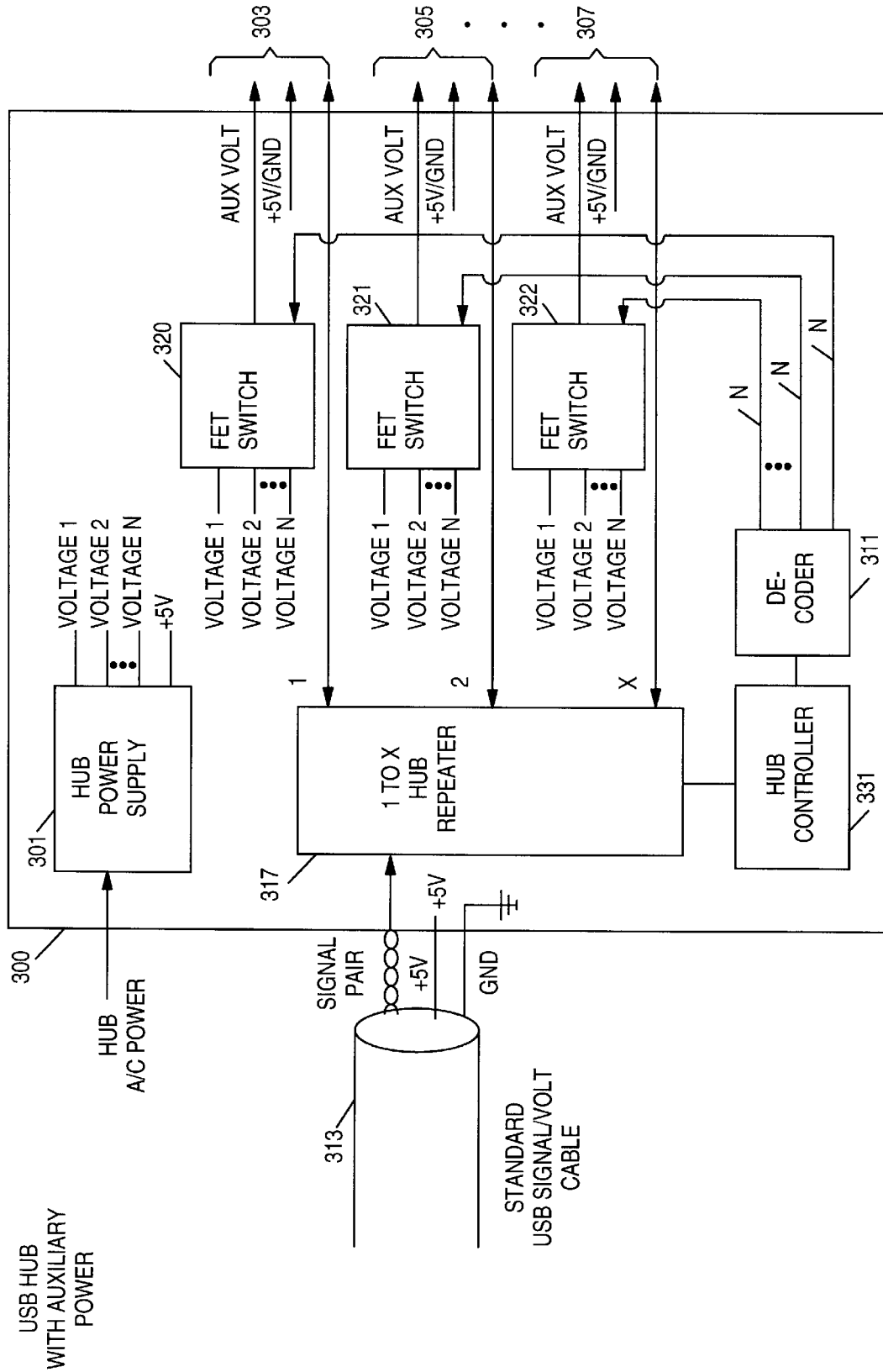


FIG. 3

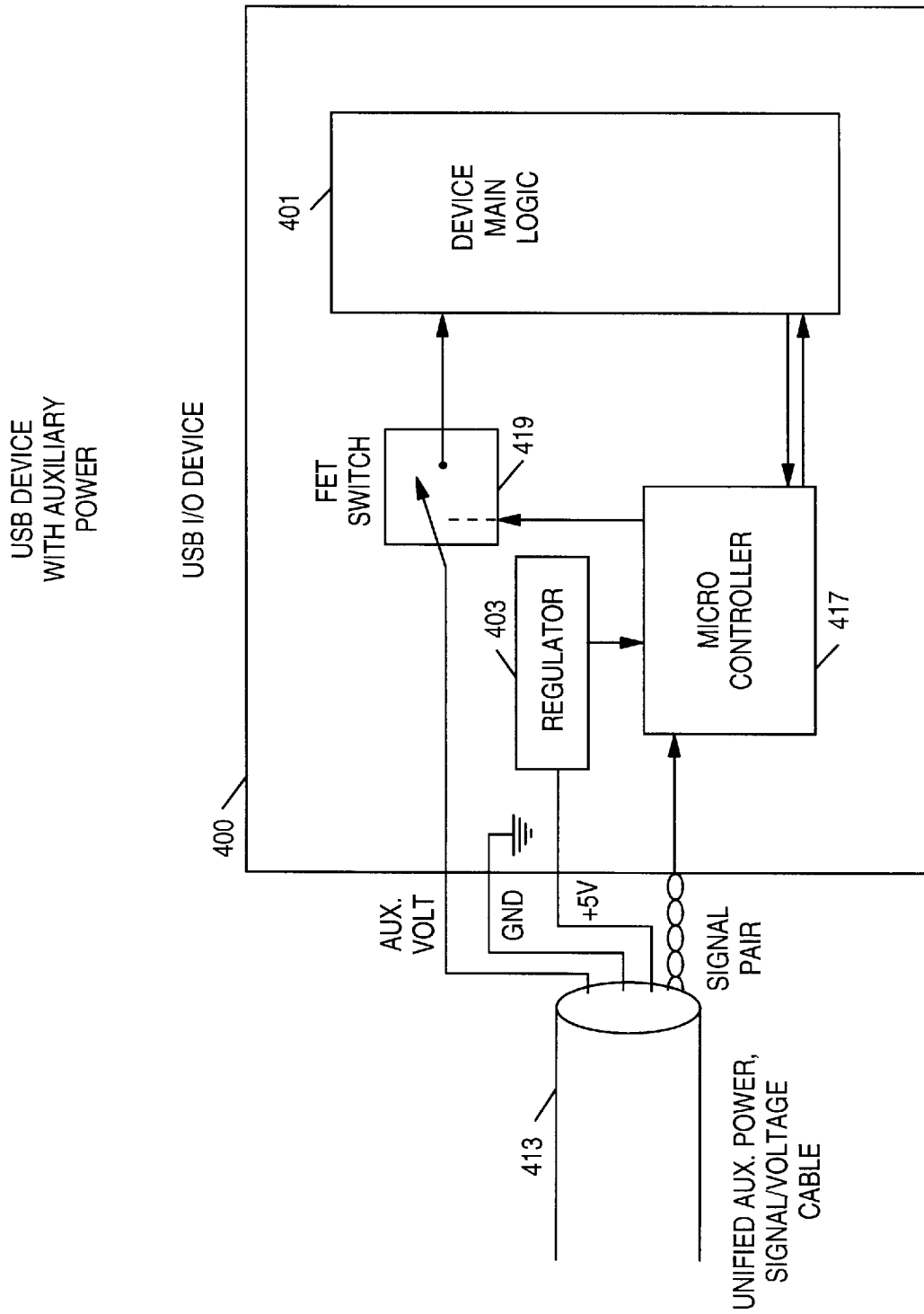


FIG. 4

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