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**Maxon et al.**

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(54) **CONTROL SYSTEM AND USER INTERFACE FOR NETWORK OF INPUT DEVICES**

(75) Inventors: **Brian Maxon**, Riverside, CA (US); **Polly Stecyk**, Fountain Valley, CA (US); **Brian Peterson**, Cypress, CA (US); **Pavel Houda**, Laguna Hills, CA (US); **George E. Palmer**, Huntington Beach, CA (US); **Shenta T. Pu**, Irvine, CA (US); **Martin Zanfino**, Coto de Caza, CA (US); **Robert A. Perry**, Mission Viejo, CA (US); **Sorin I. Teodorescu**, Fountain Valley, CA (US); **David M. Mann**, Upland, CA (US)

(73) Assignee: **Mitsubishi Digital Electronics America, Inc.**, Irvine, CA (US)

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(52) **U.S. Cl.** ..... **348/734; 348/552; 715/717; 715/718; 340/825.72**

(58) **Field of Search** ..... **726/37, 38; 715/714, 715/716, 718, 719; 348/734, 706, 731, 705, 460, 552, 553, 554; 340/825.69, 825.22, 825.24, 825.25, 825.72; 700/17**

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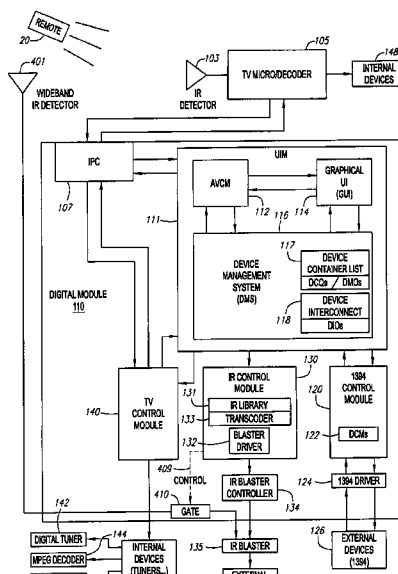
*Primary Examiner*—Michael H. Lee

(74) *Attorney, Agent, or Firm*—Orrick, Herrington & Sutcliffe LLP

(57) **ABSTRACT**

Apparatus, methods, and systems for centrally and uniformly controlling the operation of a variety of devices, such as communication, consumer electronic, audio-video, analog, digital, 1394, and the like, over a variety of protocols within a network system and, more particularly, a control system and uniform user interface for centrally controlling these devices in a manner that appears seamless and transparent to the user. In a preferred embodiment, a command center or hub of a network system includes a context and connection permutation sensitive control system that enables centralized and seamless integrated control of all types of input devices. The control system preferably includes a versatile icon based graphical user interface that provides a uniform, on-screen centralized control system for the network system. The user interface, which includes a visual recognition system, enables the user to transparently control multiple input devices over a variety of protocols while operating on a single control layer of an input command device. In an alternative embodiment, the control system also enables gated signal pass-through control while avoiding signal jamming.

**45 Claims, 19 Drawing Sheets**



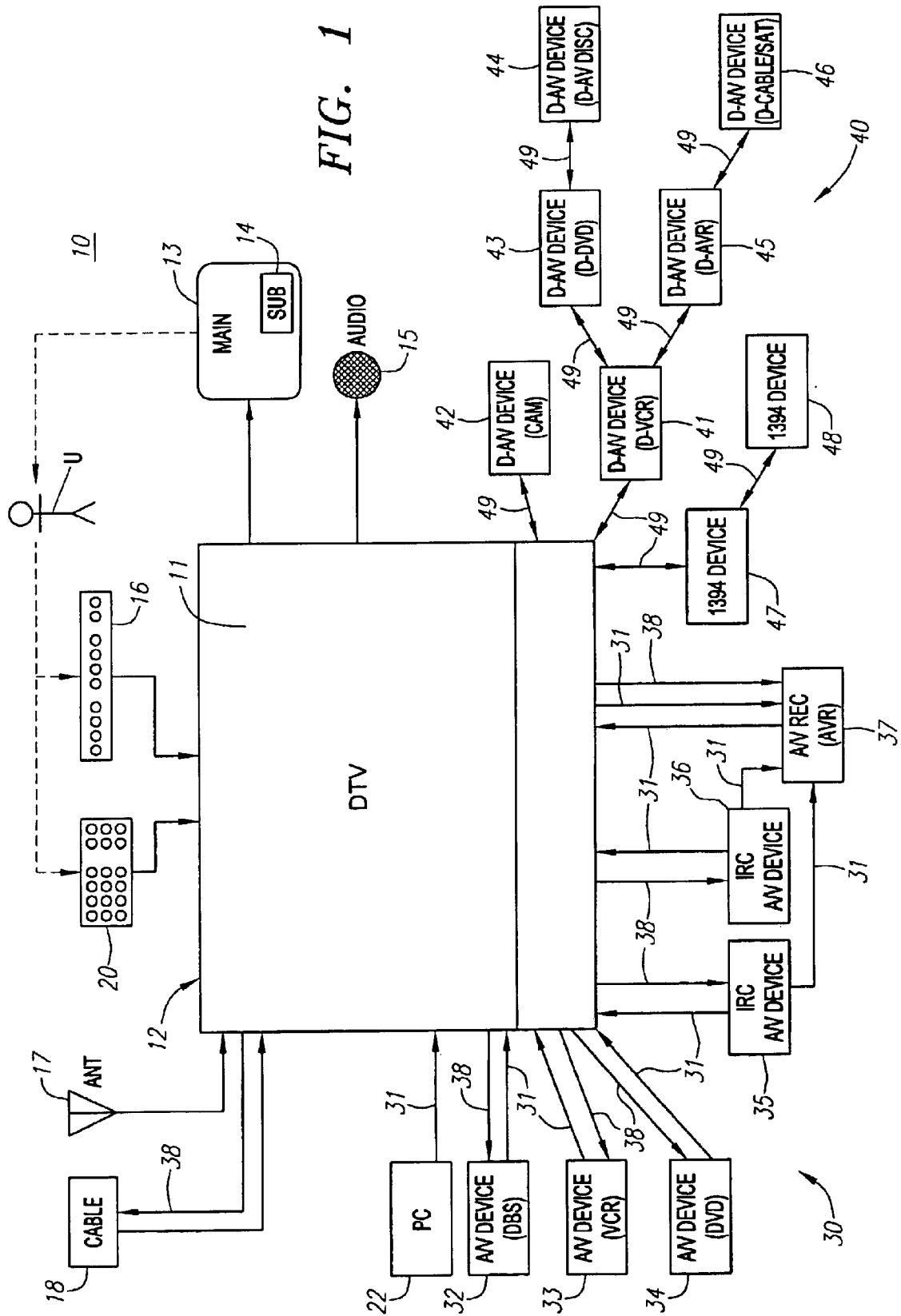
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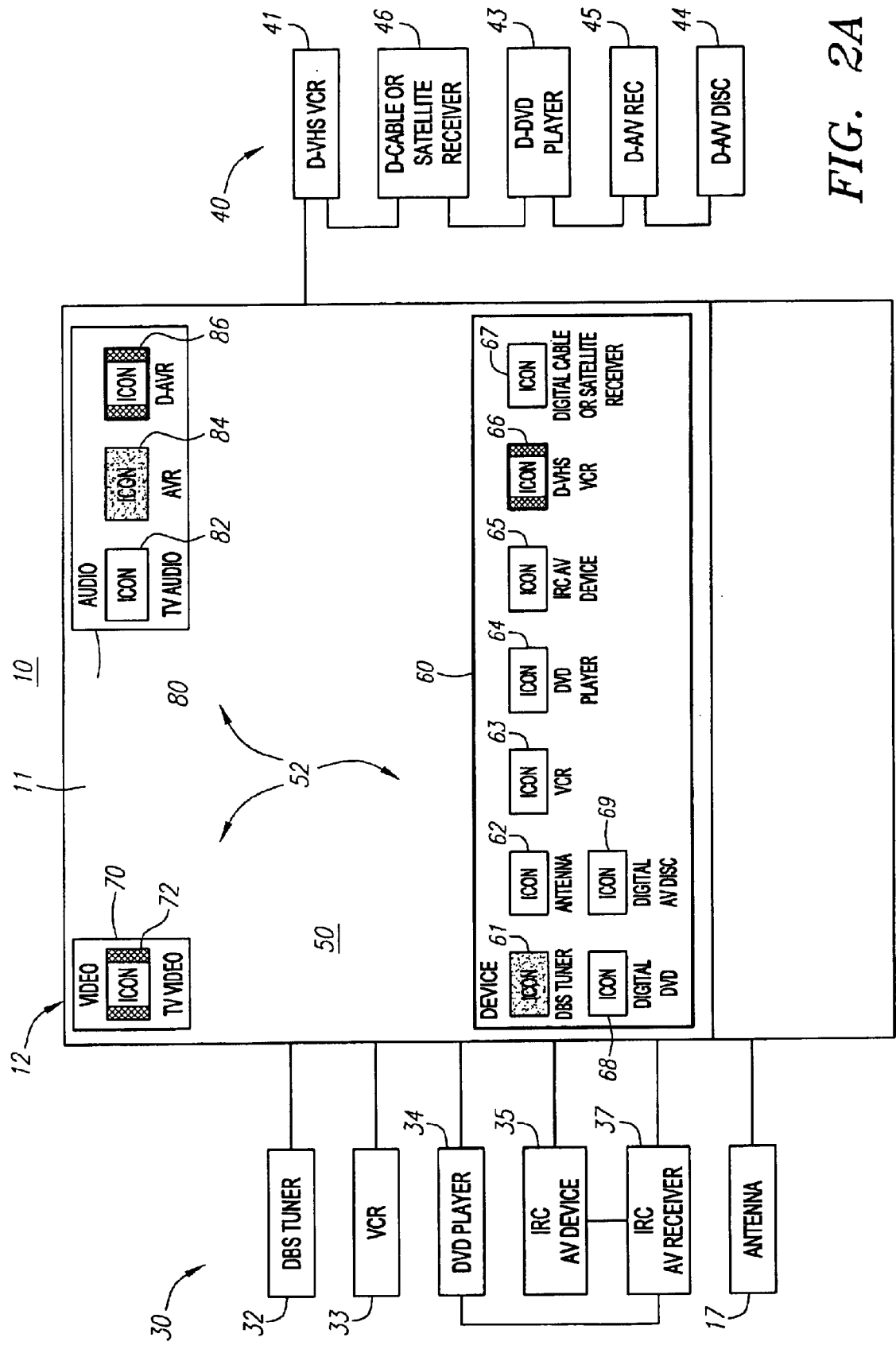


FIG. 2A

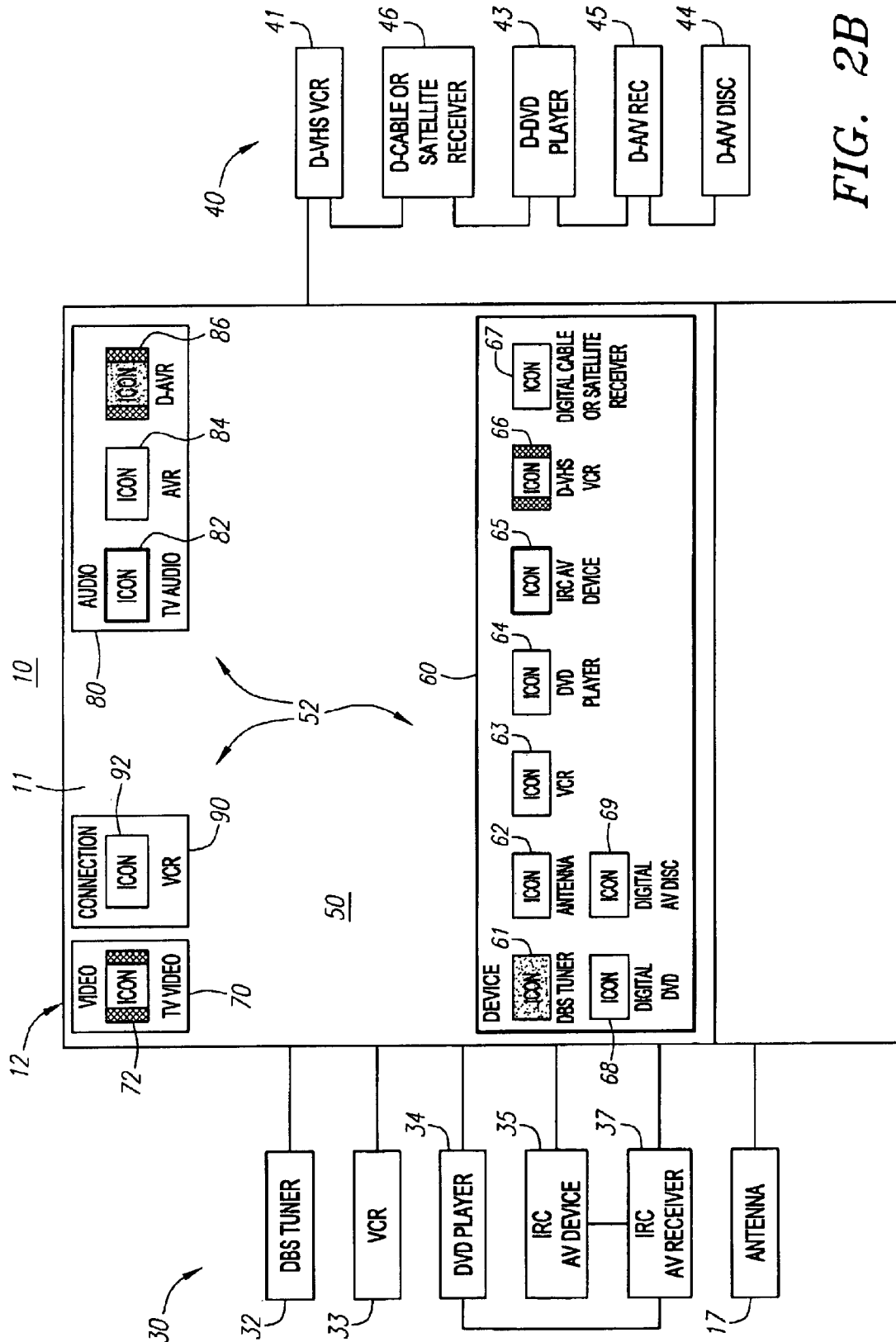


FIG. 2B

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