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(54) Title: METHOD AND APPARATUS FOR REPRESENTING DEVICES AND AVAILABLE INFORMATION WITHIN A NETWORK OF DEVICES USING OBJECT LISTS AND OBJECT ENTRIES

(57) Abstract

Object lists and object entries provide a general hierarchical model for representing functions and capabilities of a network of devices in a uniform standardized format. The object lists and object entries are used to represent devices, subdevices, supported media, installed media and available services. Preferably, the devices are coupled together in an IEEE 1394–1995 serial bus network. The list of devices within the network are included within a unit object list, including unit object descriptors each representing a corresponding device. For devices having subunits, the unit object descriptor is associated with a subunit object list, including subunit object descriptors each representing a corresponding subunit within the device. Each subunit object descriptor then also has associated object lists, as appropriate, including a supported media object list including entries representing types of media supported by the subunit and an installed media object list including entries representing information available on the media currently installed within the subunit. For subunits capable of providing services, the subunit object descriptor has an associated object list, including an available services list including entries representing the services currently available through the subunit. The uniform standardized format of the object lists and object entries of the present invention allow two devices coupled together within the IEEE 1394–1995 serial bus network to exchange information including their respective object lists and entries.

