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Rodriguez et al.

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(54) **VIDEOPHONE OVER CABLE NETWORKS**

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Related U.S. Application Data

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(51) **Int. Cl.**
H04N 7/173 (2006.01)

(52) **U.S. Cl.**
USPC **725/106**; 725/109; 370/265

(58) **Field of Classification Search**
USPC 725/87–120; 370/265–268
See application file for complete search history.

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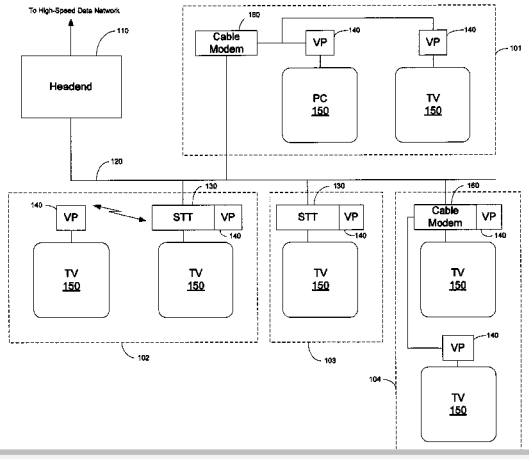
(74) *Attorney, Agent, or Firm* — Merchant & Gould

(57) **ABSTRACT**

The present invention is directed to a videophone system implemented over a cable television network. The instant invention provides a videophone comprising a camera for capturing images associated with a videophone signal, a videophone unit and a set top terminal or cable modem connecting the videophone to a cable television network. Videophone signals created at the call origination site are encoded and transported to a predetermined destination over an existing cable television network. The system uses IP addresses as phone number on the network. Additionally, transport of videophone signals between different cable systems is accomplished via a high-speed long distance data network, such as, for example, a satellite network, that provides communication between the headends of the different cable television systems. The set top terminal may be a conventional subscriber terminal, a cable modem or a subscriber terminal configured to operate as a cable modem. The set top terminal provides the interface between the videophone and the cable television system. More than one videophone may be connected to a single set top terminal. Display of videophone data may be achieved using any conventional display device, including a television set or a personal computer monitor. Accordingly, the videophone system described herein takes advantage of increased bandwidth and lower cost realized by using existing cable television infrastructure and technology.

20 Claims, 9 Drawing Sheets



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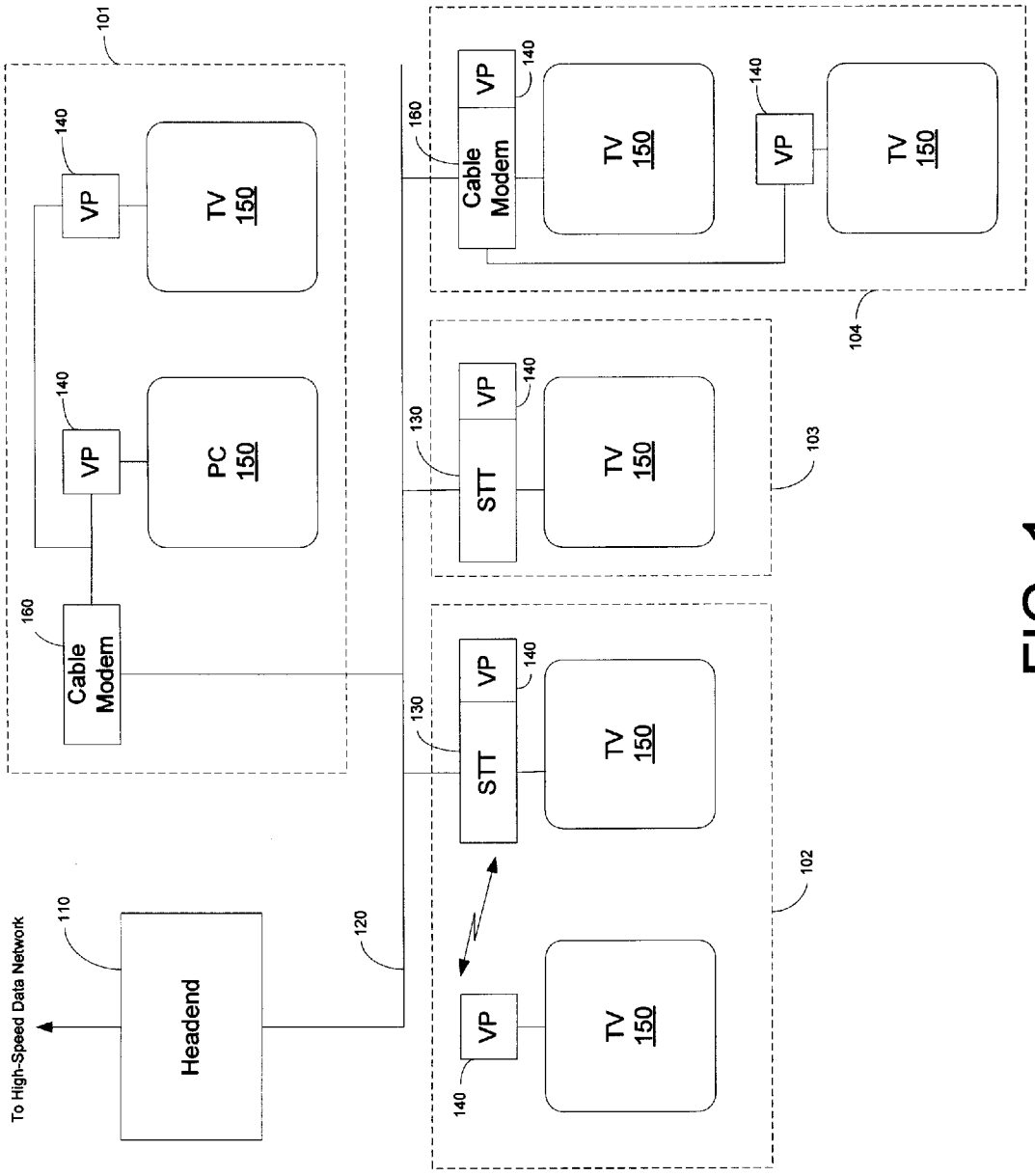

FIG. 1

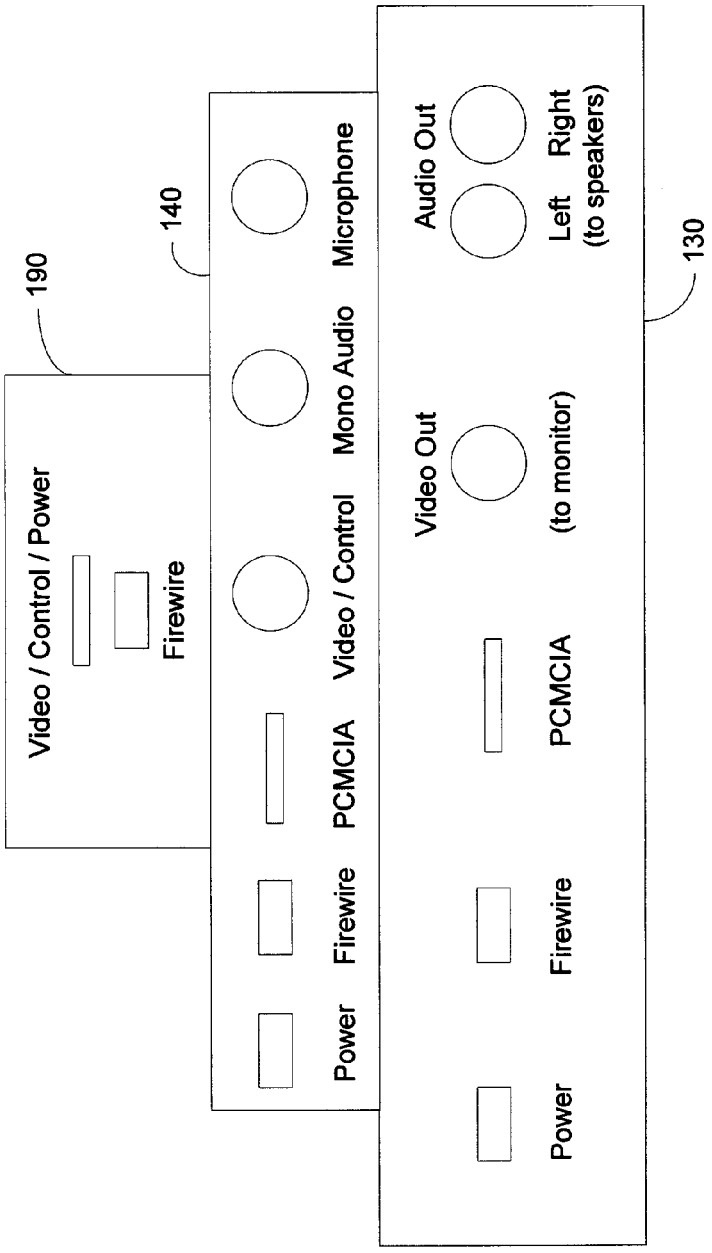

FIG. 2

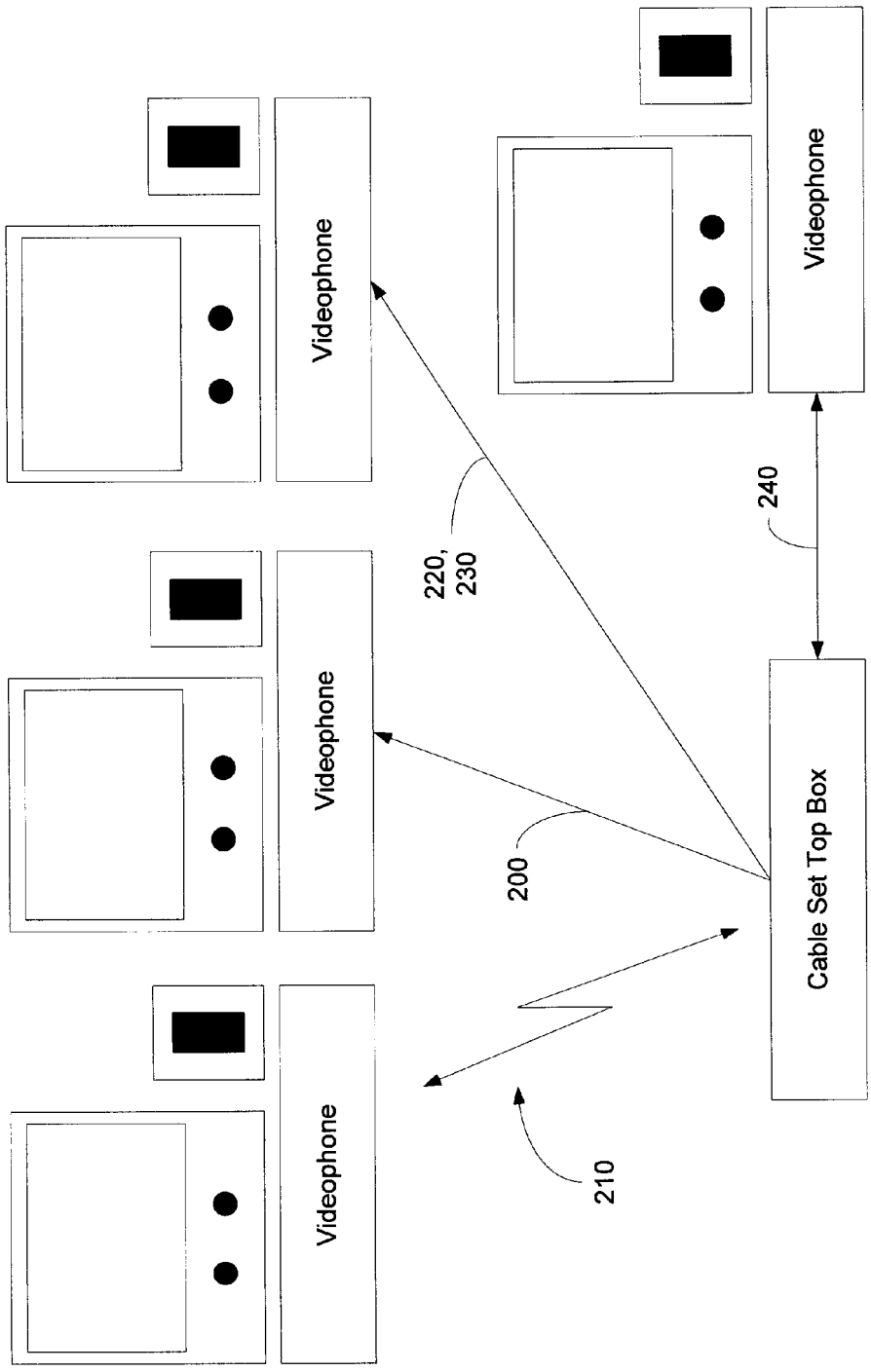

FIG. 3

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