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[54] SIMULCASTING DIGITAL VIDEO PROGRAMS FOR BROADCAST AND INTERACTIVE SERVICES

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[21] Appl. No.: **491,515**

[22] Filed: **Jun. 19, 1995**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 405,558, Mar. 16, 1995, Pat. No. 5,651,010.

[51] Int. Cl.⁶ **H04B 7/005**; H04J 4/00

[52] U.S. Cl. **370/522**; 370/535; 348/7; 455/4.1

[58] Field of Search 370/50, 69.1, 73, 370/75, 84, 112, 108, 100.1, 485, 312, 486, 487, 496, 522, 523, 535, 537, 538; 348/7, 6, 12, 13, 21, 423, 385, 387, 723; 455/4.1, 4.2, 3.1, 51.1, 51.2, 5.1; 375/11, 99, 356; 364/514 R

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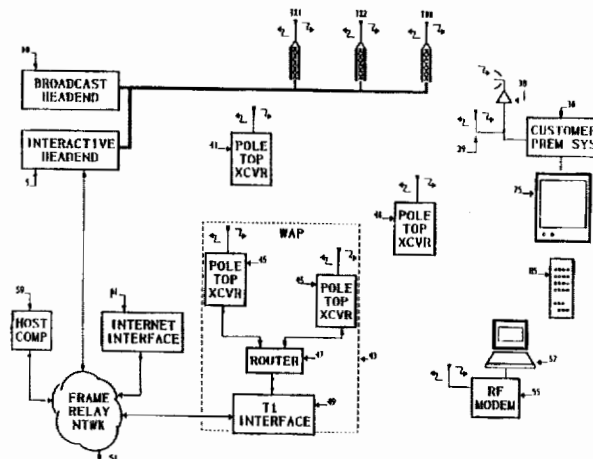
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Attorney, Agent, or Firm—Lowe, Price, LeBlanc & Becker

[57] ABSTRACT

To provide interactivity, a public wireless packet data network is combined with a broadband digital broadcast network. In the preferred embodiment, the broadcast network utilizes multiple transmitters at separately located sites simultaneously broadcasting the same multi-channel, multi-program signal. Broadcast waves from the transmitters propagate throughout substantially overlapping portions of the service area. Customer premises receiving systems include a receiving antenna and one or more digital entertainment terminals. The terminal includes a channel selector and digital receiver for capturing a digital transport stream from a selected channel. A processor converts selected program information from the transport stream for presentation, e.g. via a television set. The terminal also includes a CPU controlling the operation of the channel selector and the processor in response to user inputs. The CPU also communicates signaling information for interactive services via an RF packet data modem included in the terminal and the public wireless packet data network. In addition to the signaling for interactive services, the packet data network provides transport for data communications between other data devices.

83 Claims, 12 Drawing Sheets



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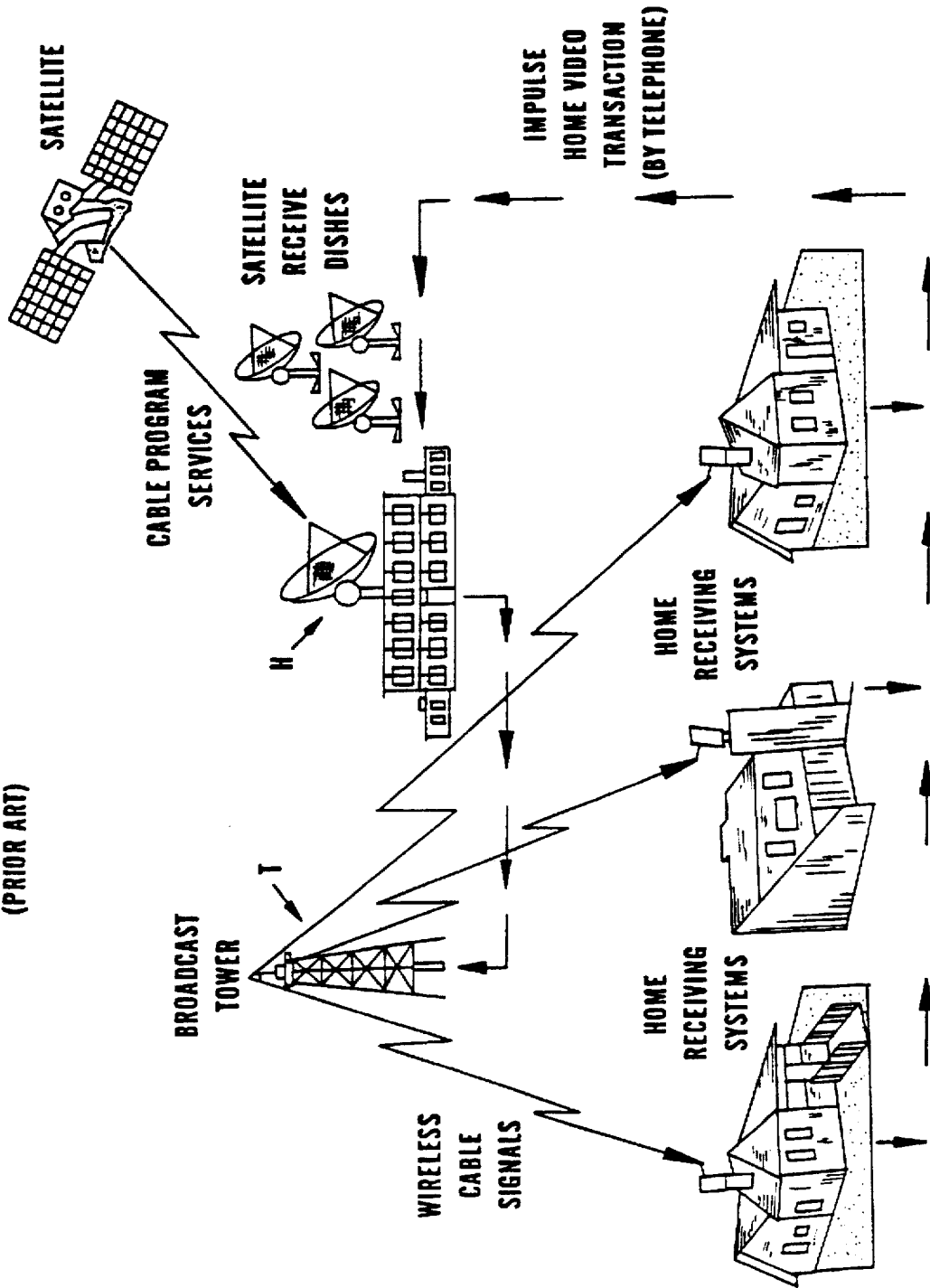
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FIGURE 1
(PRIOR ART)



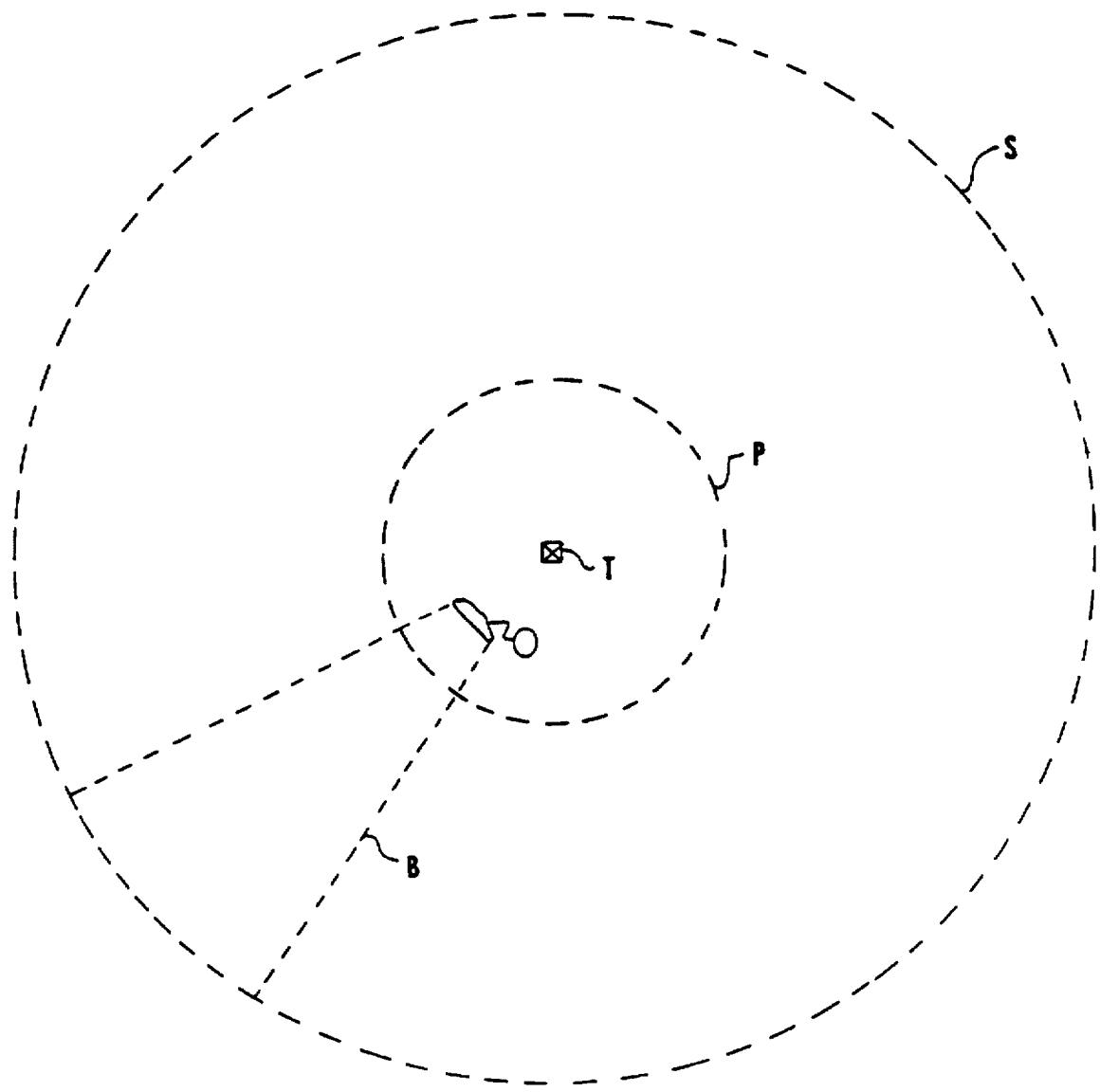


FIGURE 1A
(PRIOR ART)

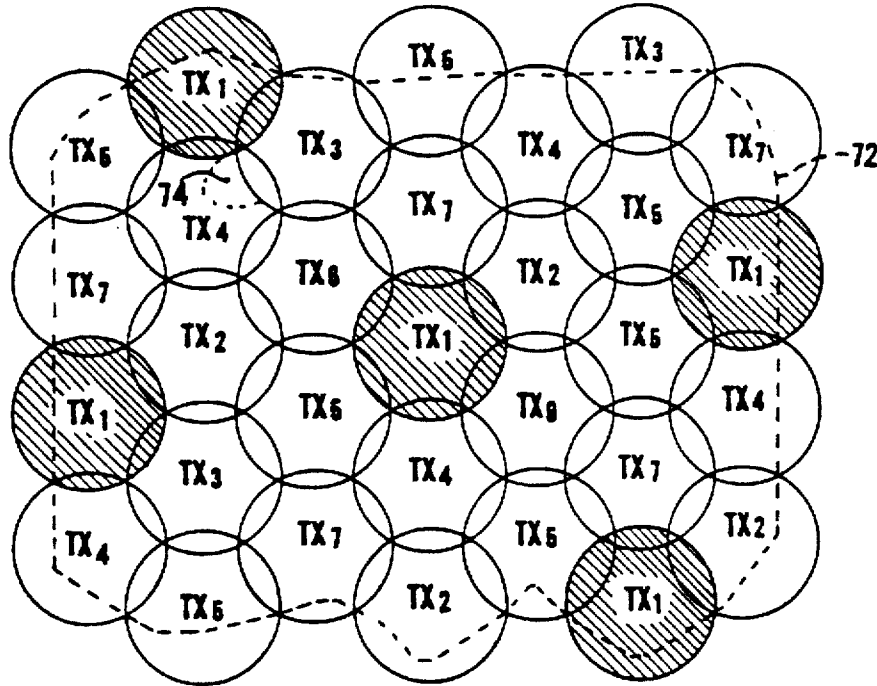


FIGURE 2
(PRIOR ART)

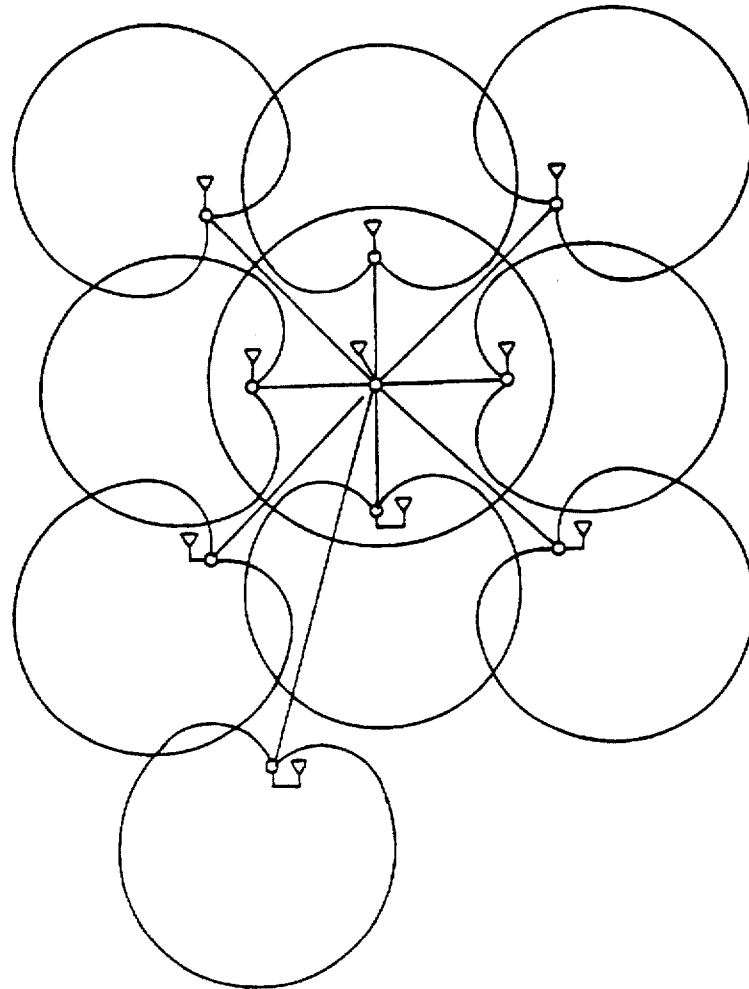


FIGURE 3
(PRIOR ART)

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