

EXHIBIT 17

(12) **United States Patent**
Iwabuchi et al.

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(54) **TELEVISION RECEIVER WITH A TV PHONE FUNCTION**

(75) Inventors: **Kazunori Iwabuchi**, Yokohama (JP);
Hiroki Mizosoe, Kawasaki (JP);
Mutsumi Shimoda, Kawasaki (JP);
Setiawan Bondan, Yamato (JP);
Manabu Sasamoto, Yokohama (JP)

(73) Assignee: **Hitachi, Ltd.**, Tokyo (JP)

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(30) **Foreign Application Priority Data**
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(51) **Int. Cl.**
H04N 7/14 (2006.01)

(52) **U.S. Cl.** **348/14.04**

(58) **Field of Classification Search** 348/14.04,
348/14.01, 14.07

See application file for complete search history.

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Primary Examiner — Stella Woo

(74) *Attorney, Agent, or Firm* — Stites & Harbison, PLLC;
Juan Carlos A. Marquez, Esq.

(57) **ABSTRACT**

A videophone system includes a processor which selectively sets a television (TV) broadcast program viewing function mode and videophone function mode in response to manual operation of a remote control, a decoder which performs, in the TV program view mode, a TV program-use decode function for decoding a broadcast program signal received from a TV tuner to thereby display it on a display screen while producing audio sounds by loudspeakers and which performs, in the videophone function mode a videophone-use decode function for decoding a videophone signal received from a distant party to thereby display on the screen an image of the distant party using the screen and speakers, and an encoder which performs a videophone-use encode function for encoding a video signal from a camera and a voice signal from a microphone to generate a videophone signal, which is sent to the distant party via a network.

8 Claims, 10 Drawing Sheets

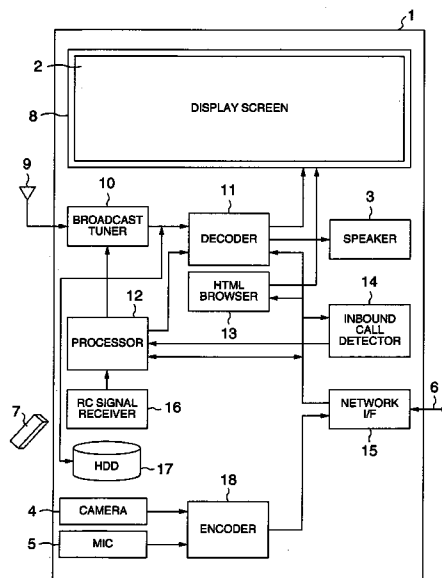


FIG. 1

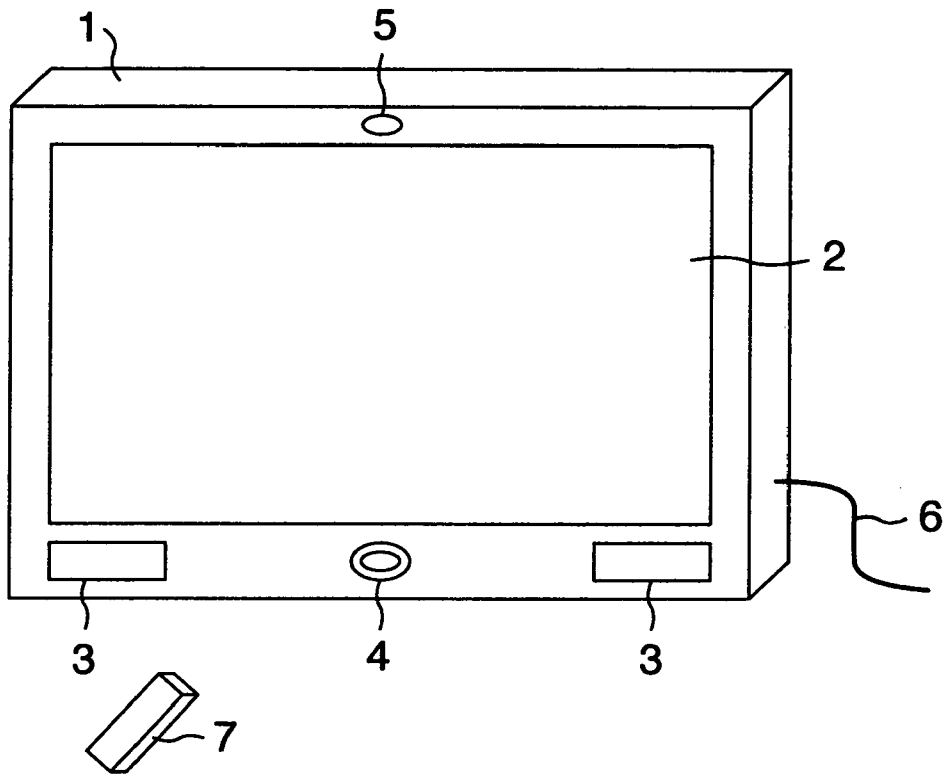


FIG. 2

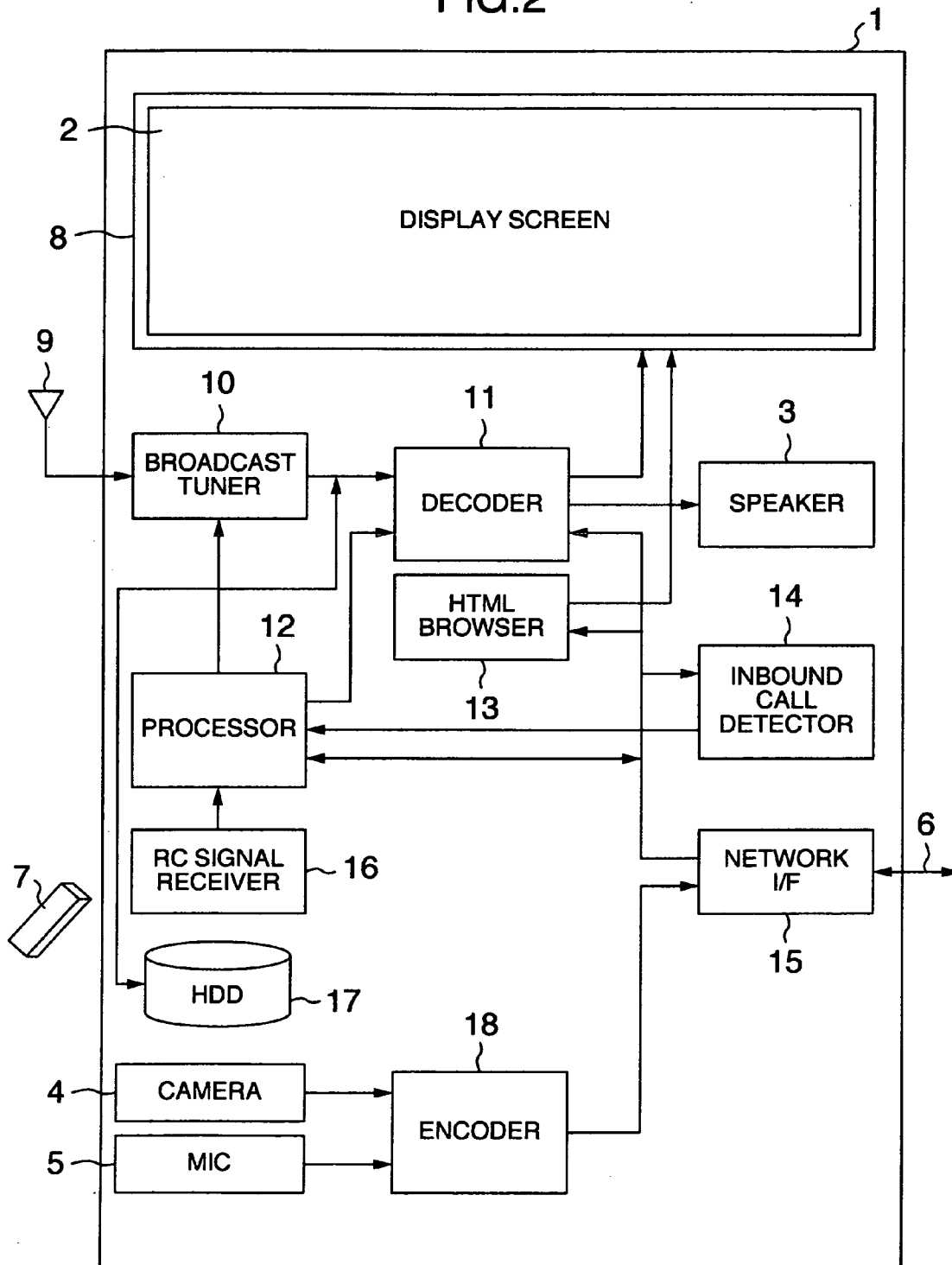


FIG.3

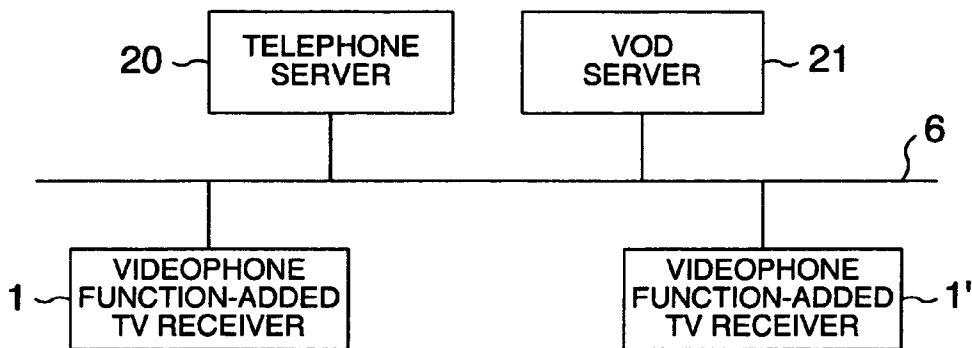
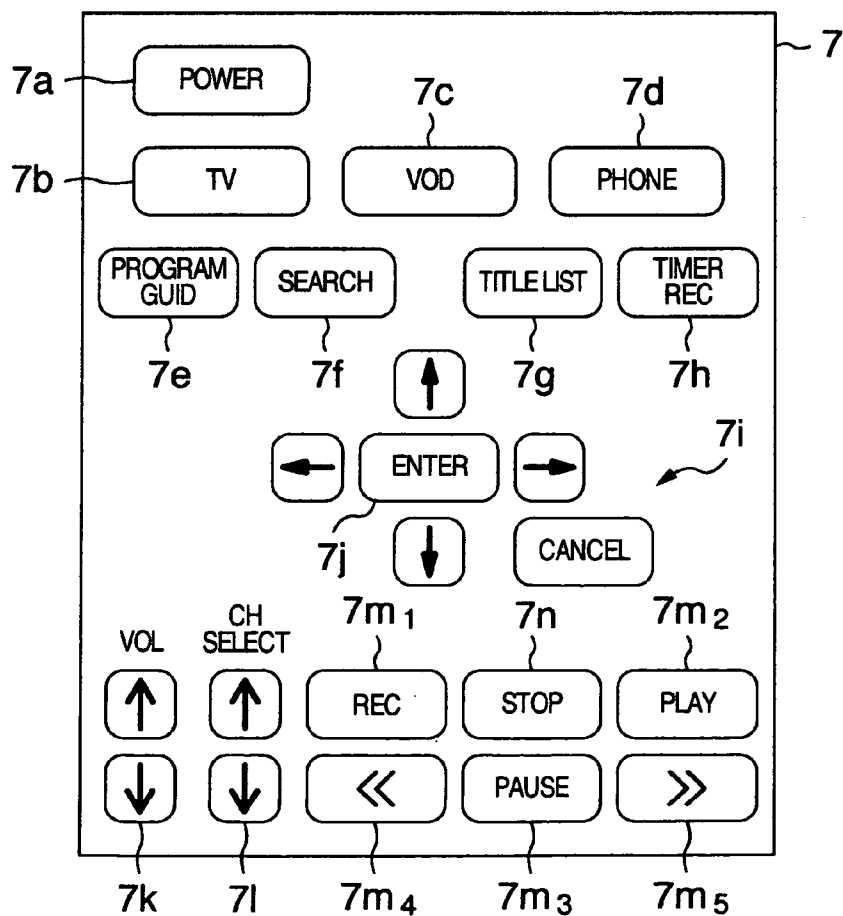


FIG.4



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