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

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(54) **INTELLIGENT KEYBOARD SYSTEM**

FOREIGN PATENT DOCUMENTS

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WO92/03884 \* 3/1992 (WO) ..... 379/FOR 132

\* cited by examiner

(\* ) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

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(21) Appl. No.: **09/281,739**

(57) **ABSTRACT**

(22) Filed: **Jun. 4, 1999**

**Related U.S. Application Data**

This invention generally relates to a system level scheme utilizing an intelligent keyboard, hereafter called an Intellikeyboard, which can operate as a universal compute, command, and control module that interfaces either through wired or wireless means with a number of intelligent appliances, personal computers, work-stations, servers, televisions, printers, smart devices, intelligent devices, telephones, or other devices. The Intellikeyboard has the ability to transmit and receive voice, text, graphics, and other data through either wired or wireless means. The Intellikeyboard may work in tandem with a local or network server to perform standard computing functions, serve as a command and control unit, perform standard telephony functions, transmit and receive electronic mail, voice mail, video, and audio. The invention also anticipates the need for multichannel and sequential/simultaneous tasking and interface with numerous intelligent appliances and devices.

(63) Continuation-in-part of application No. 08/764,903, filed on Dec. 16, 1996, now abandoned.

(51) **Int. Cl.**<sup>7</sup> ..... **H04M 11/00**

(52) **U.S. Cl.** ..... **379/110.01; 379/90.01**

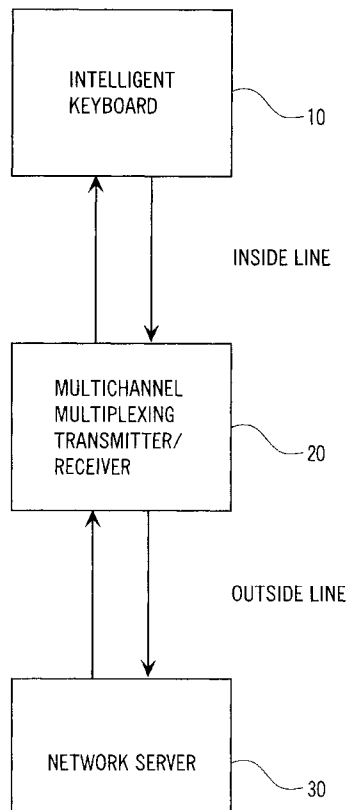
(58) **Field of Search** ..... 379/110.01, 90.01, 379/93.05, 93.37, 100.01, 102.02, 102.03, 419, 420, 428, 429, 441, FOR 132

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**1 Claim, 12 Drawing Sheets**



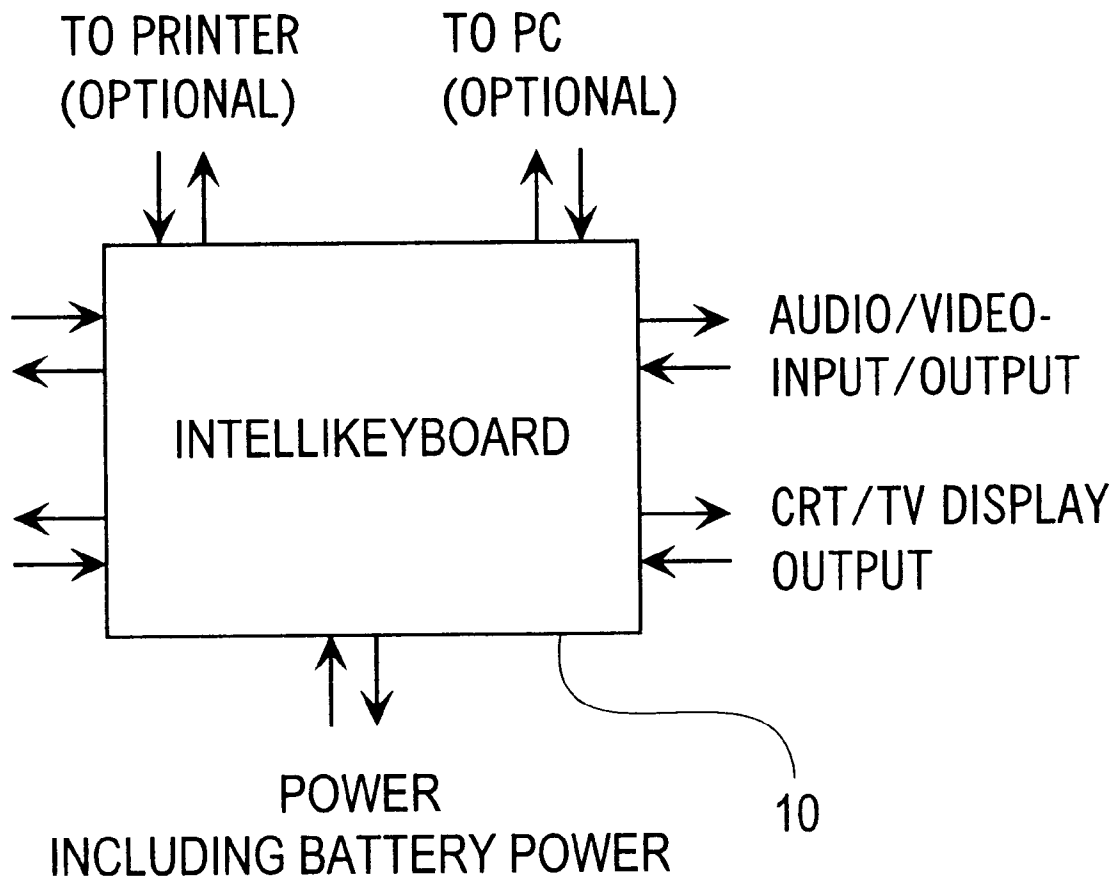


FIGURE 1

DISPLAY	TELEPHONY MAY INCLUDE BUILT-IN MICROPHONE AND SPEAKERS	INPUT BLOCK RECEIVER BLOCK DECODER BLOCK INPUT BUFFER BLOCK INPUT CONTROLLER BLOCK PROCESSOR BLOCK DATA COMPRESSION BLOCK OUTPUT BUFFER BLOCK OUTPUT CONTROLLER BLOCK ENCODER BLOCK TRANSMISSION BLOCK MEMORY BLOCK DATA STORAGE BLOCK PROGRAMMABLE LOGIC BLOCK	TRANSMIT/RECEIVE FUNCTION OR MODEM WHICH MAY OPERATE THROUGH EITHER WIRED OR WIRELESS MEANS
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FIGURE 2

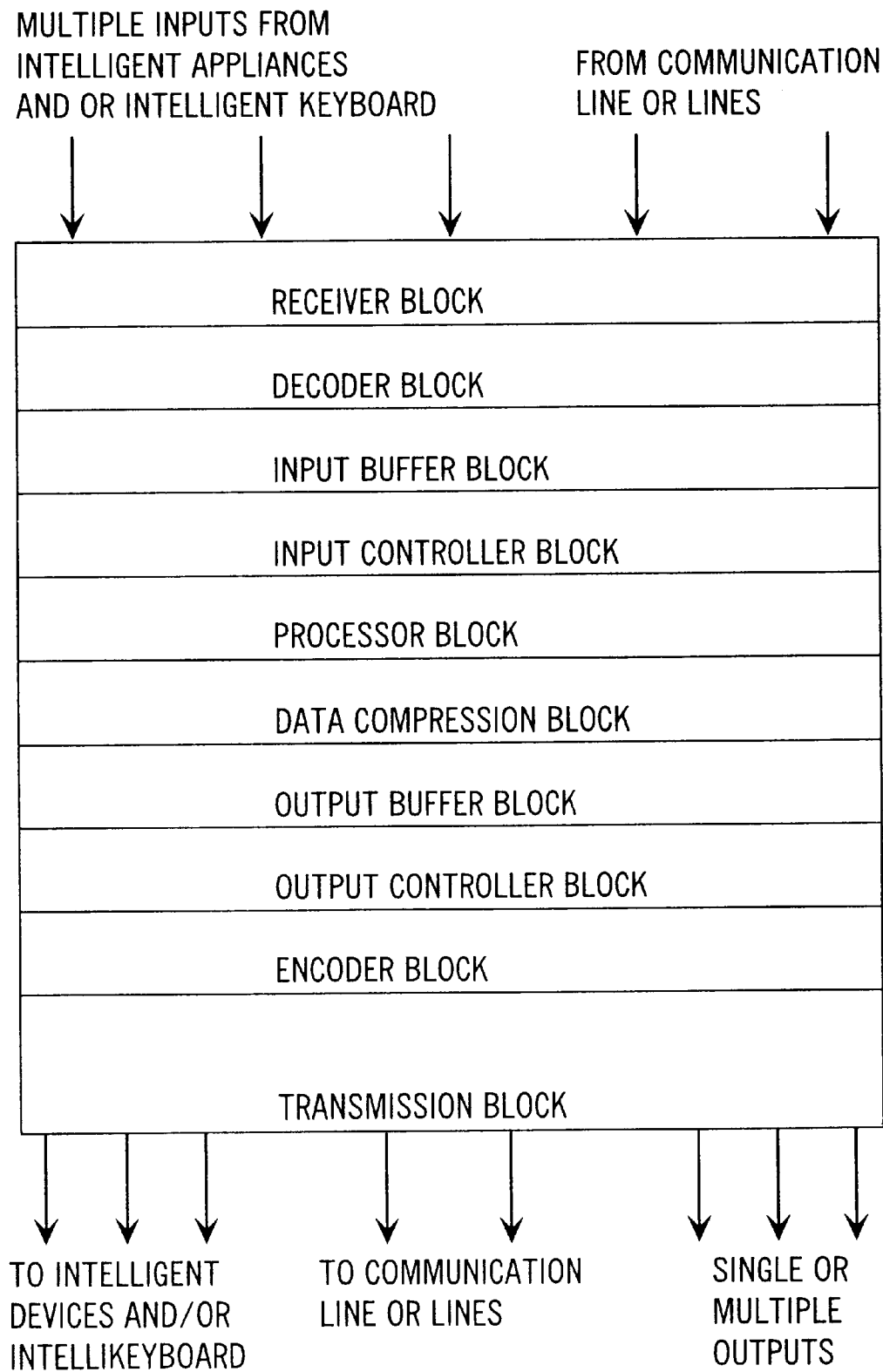


FIGURE 3

SENDING DATA:

CODE	INFORMATION	CODE
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RECEIVING DATA:

DECODE	INFORMATION	DECODE
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FIGURE 4

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