United States Patent [19]

Cohen

[54] **PATIENT MONITORING SYSTEM INCLUDING SPEECH RECOGNITION CAPABILITY**

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Related U.S. Application Data

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[51] **Int. Cl.**^{7} **G10L 3/00**
[52] **U.S. Cl.** **704/275**; 704/271; 706/924
[58] **Field of Search** 395/2.79, 2.81; 379/38, 93, 106; 704/270, 275, 273, 272; 706/924, 60, 61

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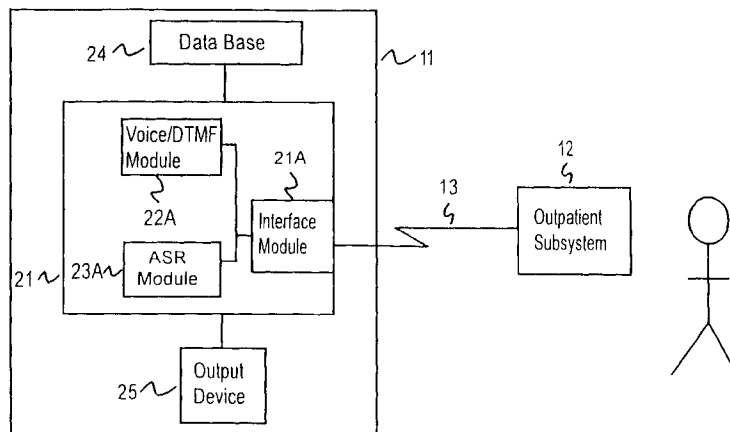
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[57] **ABSTRACT**

A patient monitoring system. A patient has access to a telephone. The telephone is operated by a patient. A central monitoring system is coupled to the telephone. The central monitoring system generates questions concerning a health condition of the patient for the patient to answer using the keys of the telephone or by speaking the correct response. The central monitoring system stores answers to the questions for later retrieval. The central monitoring system can include a DTMF modem decoder for receiving and decoding DTMF tones generated by the patient using the touch-tone telephone and transmitted to the central monitoring system. The DTMF tones represent the health condition of the patient. A computer processor is coupled to the DTMF modem decoder. A voice generator is also coupled to the computer processor and generates voice output under the control of the computer processor. The voice output is transmitted to the touch-tone telephone. A database is coupled to the computer processor, storing a patient record reflecting the health condition of the patient and also storing the questions concerning the health condition of the patient.

21 Claims, 9 Drawing Sheets

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11

Central
Subsystem

13

12
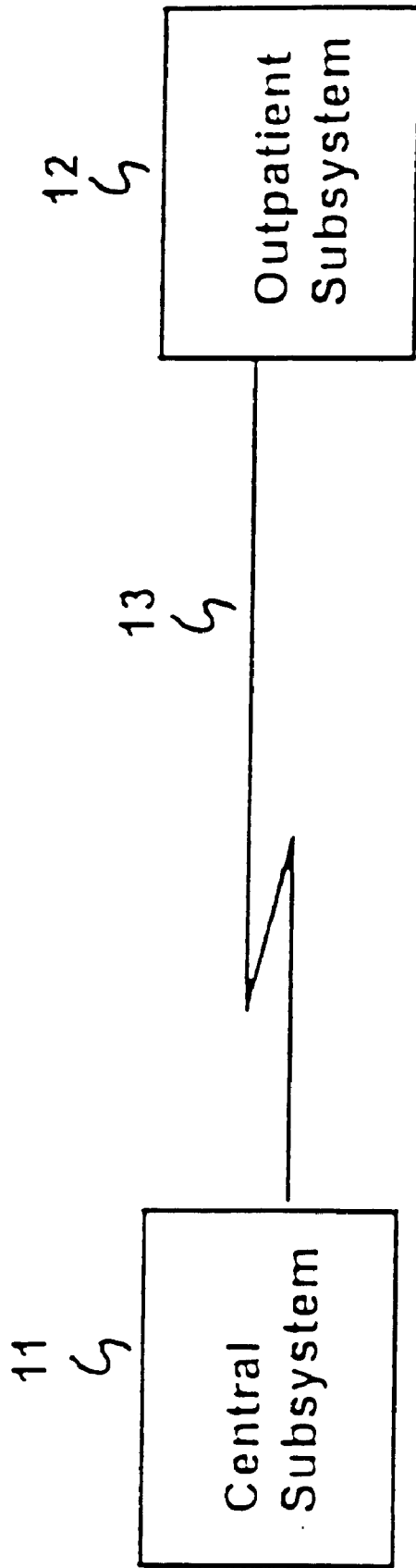
Outpatient
Subsystem

Figure 1

Figure 2

Figure 2A

DOCKET ALARM
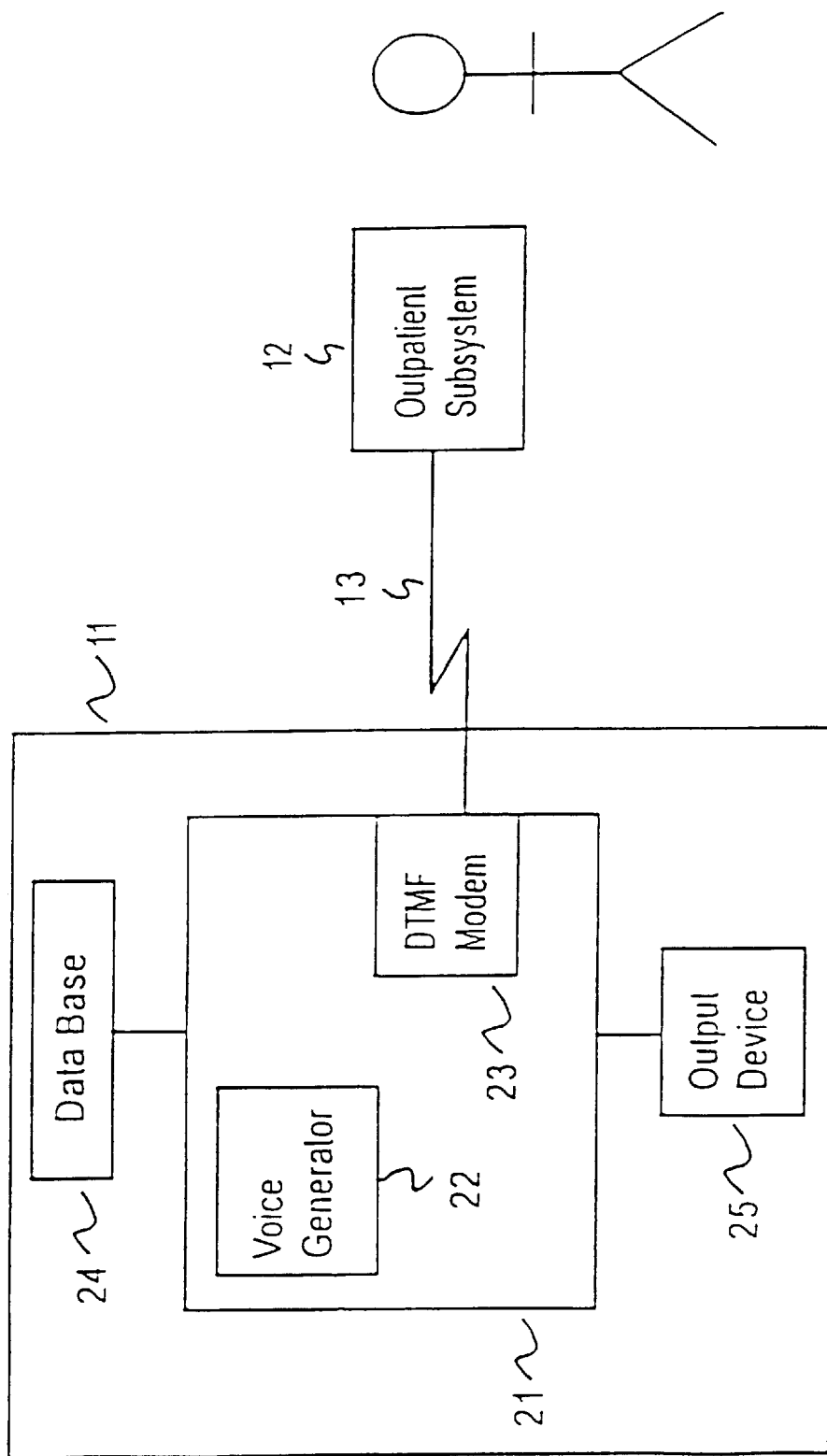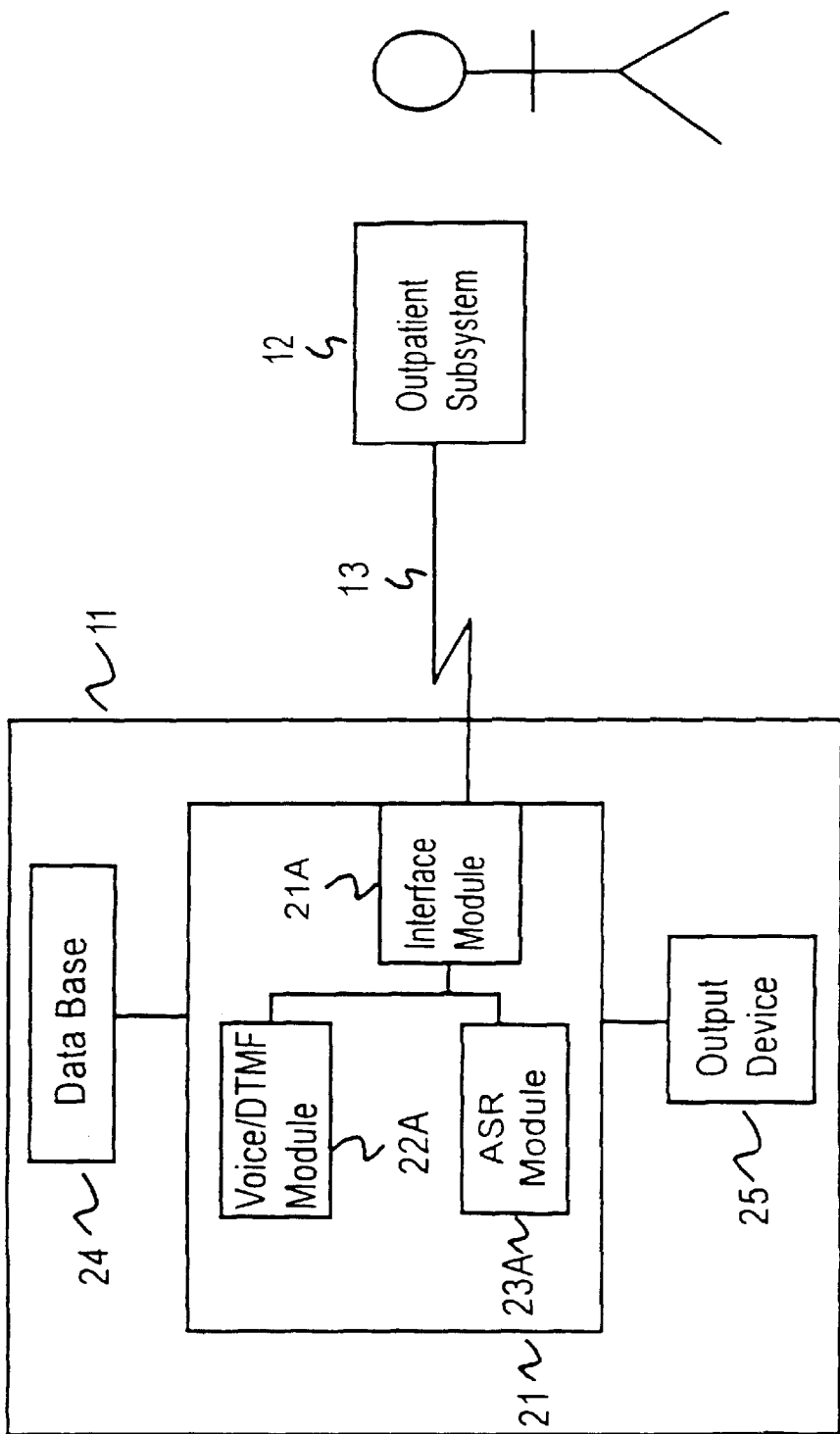
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