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# United States Patent [19]

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**Kikinis**

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[54] **COMPUTER-TO-TELEPHONE INTERFACE**

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[73] Assignee: **Elonex LP Holdings, Ltd.**, London, United Kingdom

[21] Appl. No.: **725,183**

[22] Filed: **Oct. 1, 1996**

### Related U.S. Application Data

[63] Continuation of Ser. No. 446,440, Jul. 14, 1995, abandoned, which is a continuation of Ser. No. 58,922, May 7, 1993, abandoned.

[51] Int. Cl.<sup>6</sup> ..... **H04M 17/00; H04M 1/00**

[52] U.S. Cl. .... **379/144; 379/355; 379/356**

[58] Field of Search ..... **379/96, 97, 98, 379/99, 142, 144, 354, 355, 356, 357, 91.01, 93.05, 93.06, 93.23, 110.01**

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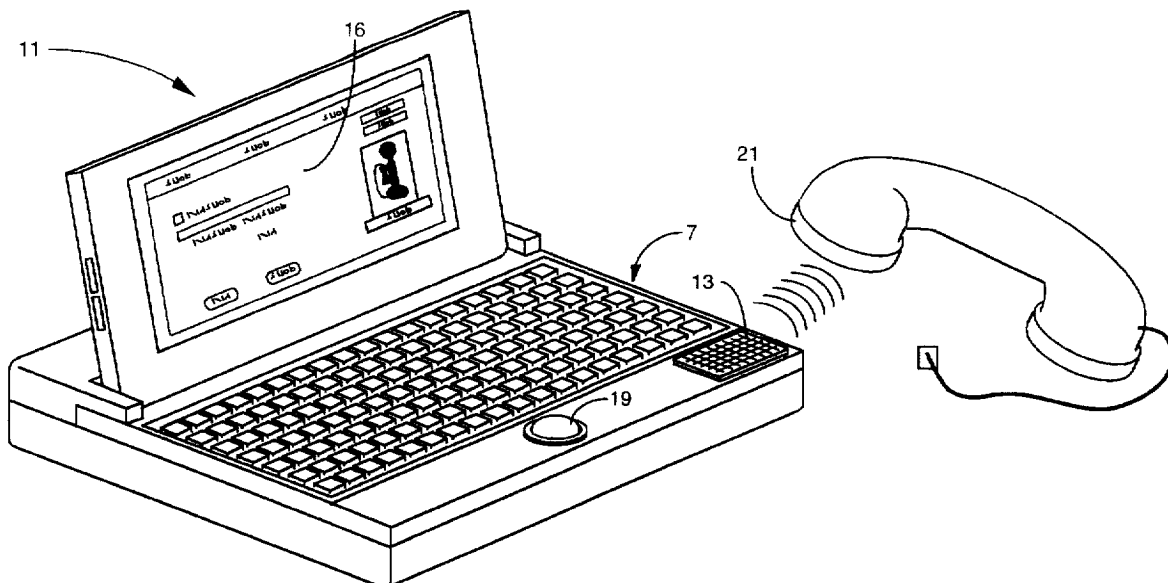
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### [57] ABSTRACT

A portable computer, such as a laptop, notebook, or palmtop computer, comprises control routines for providing a sophisticated touch-tone dialer operable through an existing or supplied output speaker, enabling calls to be routed without making a wired direct connection between the telephone equipment and the computer. In one embodiment a system is provided for transmitting computer-usable data over a phone connection through a pre-stored relationship between DTMF tones and ASCII code.

**8 Claims, 11 Drawing Sheets**



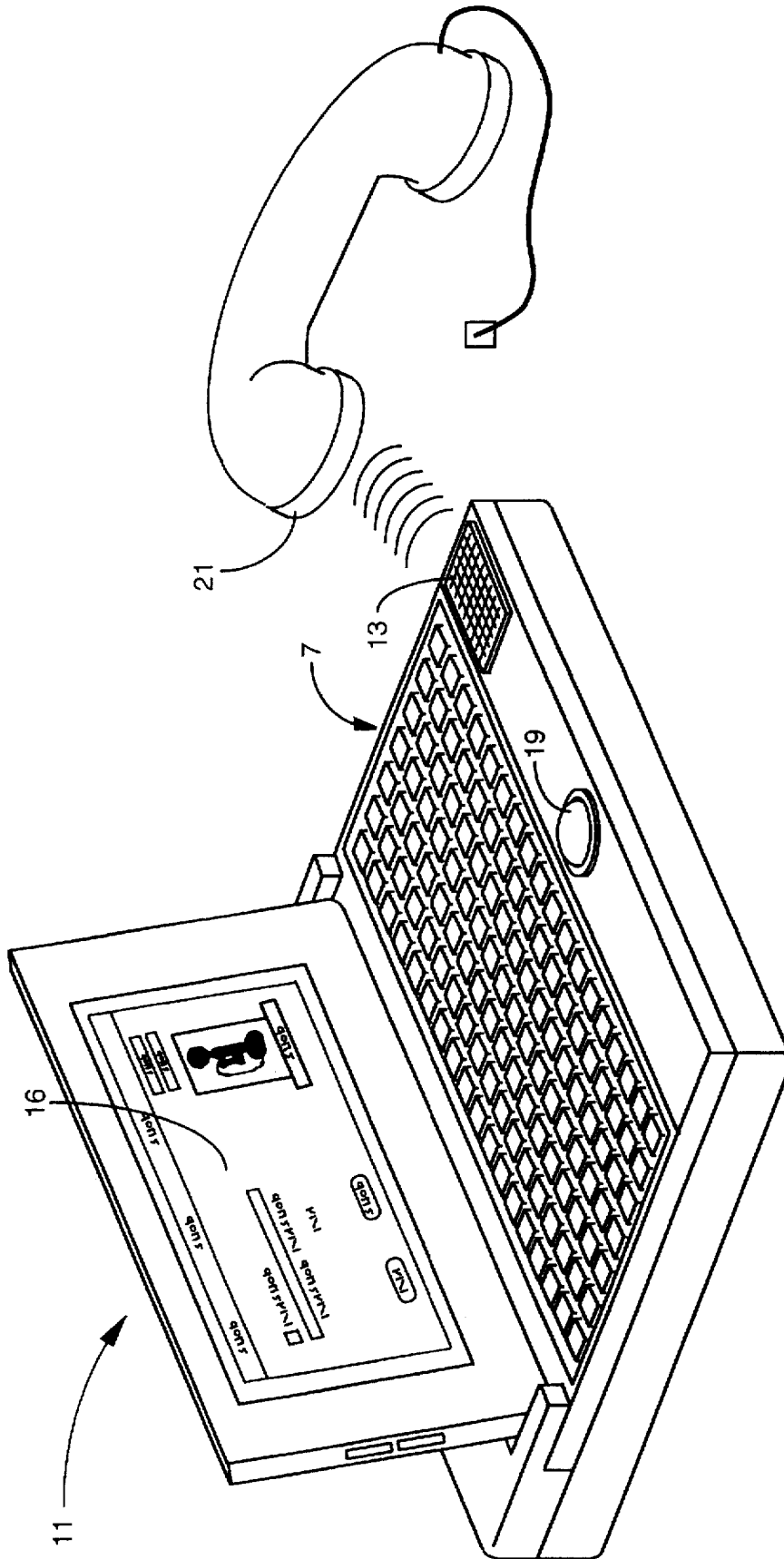


Fig. 1

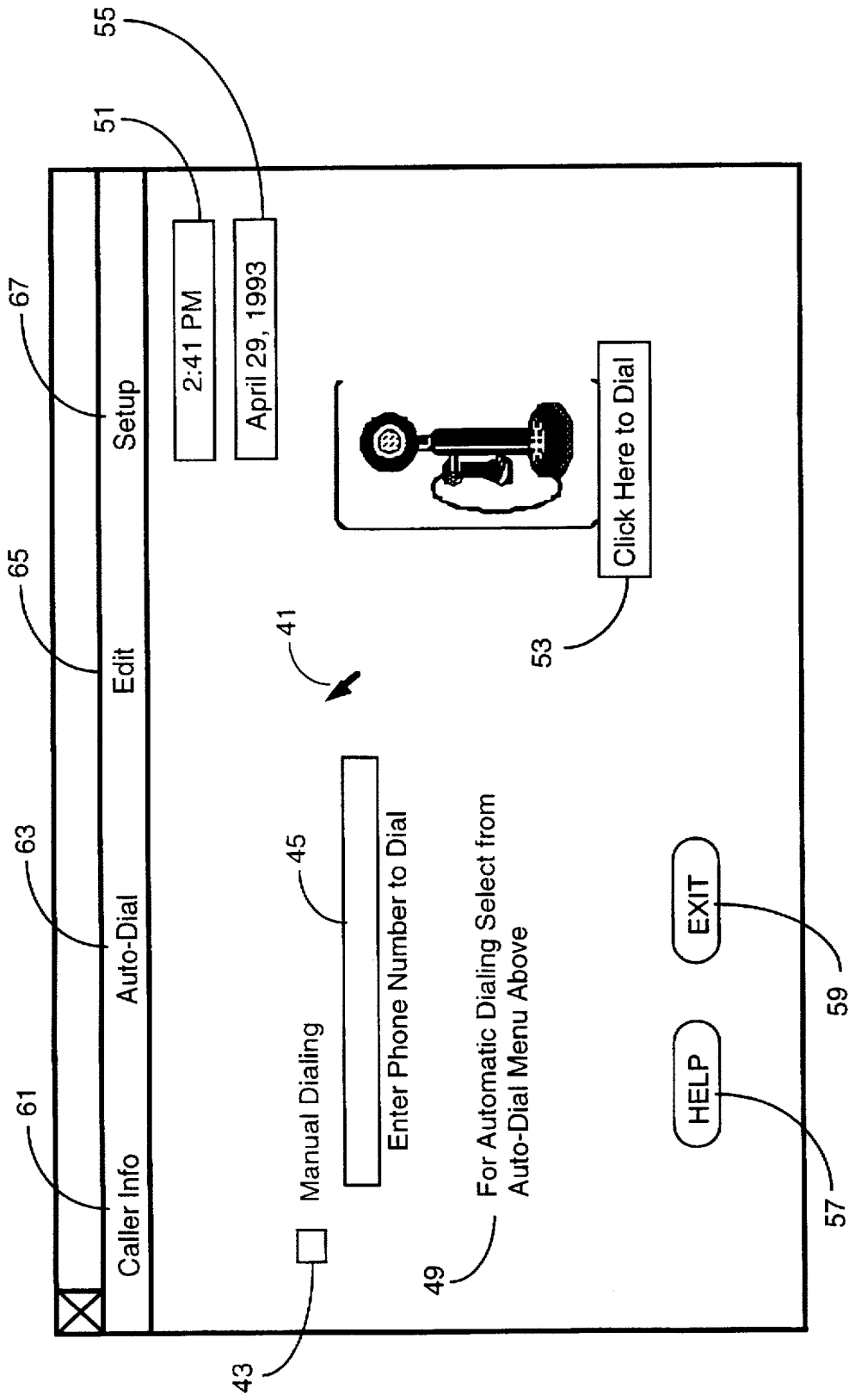


Fig. 2A

69  
73  
75  
77  
79

CALLER INFO:  
Carrier:  AT&T  MCI  SPRINT  Other  
Credit Card ID:

71  
72

HELP OK CANCEL

Fig. 2B

81  
83  
85  
87  
89  
91

DIAL LIST  
AREA CODE:

Display by No.  
 Display by Name

Moran, George	727-2393
Morgan, Helen	348-4386
Murchison, Sydney	222-9999
Mylar Products, Inc	727-8816
Nascent Sciences	348-8810

82

HELP OK CANCEL

Fig. 2C

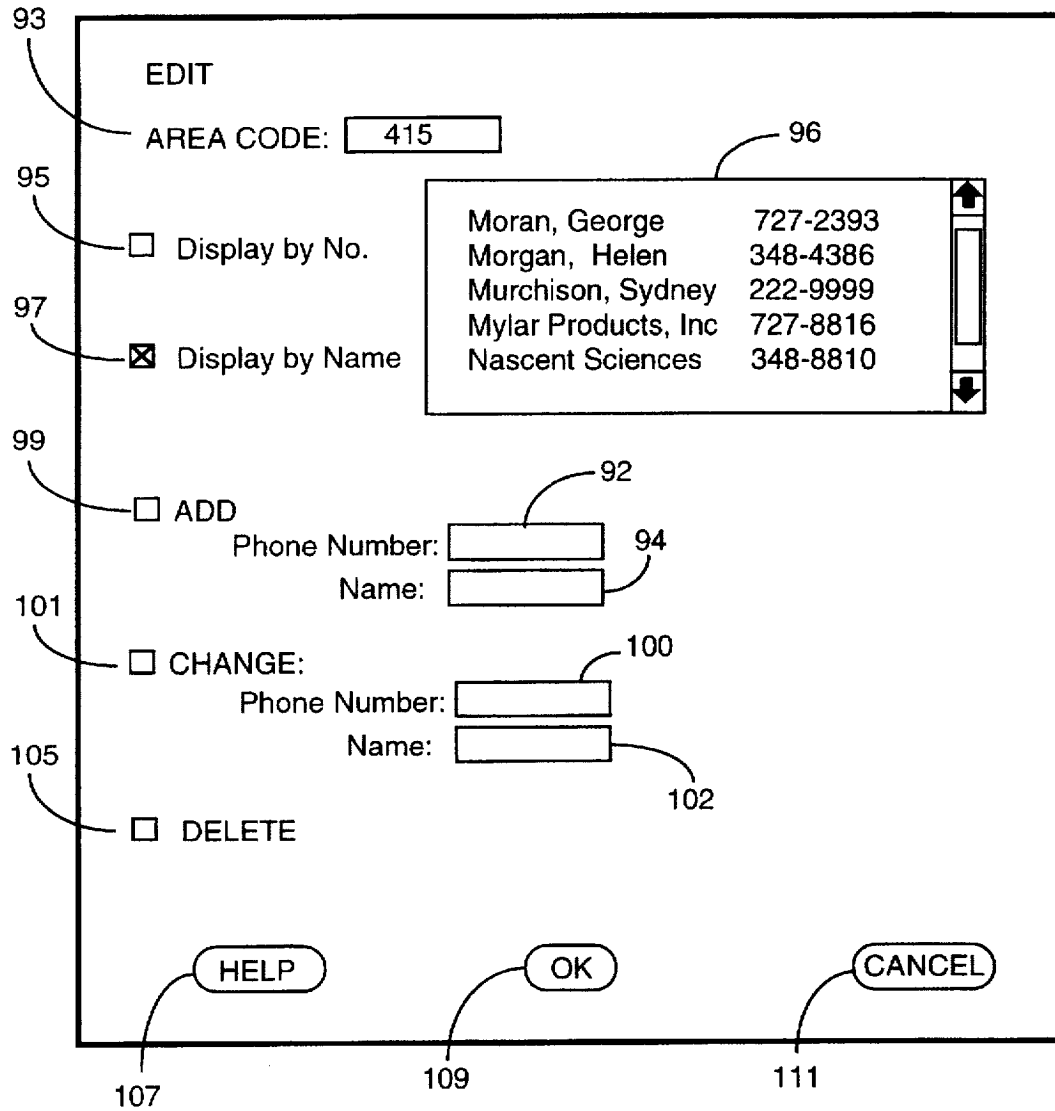


Fig. 2D

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