United States Patent [19]

Wakatsuki et al.

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[54] PORTABLE DATA INPUT APPARATUS WITH DIFFERENT DISPLAY MODES

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[30] Foreign Application Priority Data

Nov. 26, 1988 [JP] Japan 63-299317 Nov. 26, 1988 [JP] Japan 63-299318

[51] Int. Cl.⁵ G06K 7/10; G09G 1/06 340/711; 340/727

[58] Field of Search 235/462, 472, 375, 383, 235/454; 340/707, 711, 727; 341/22, 23

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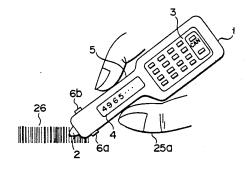
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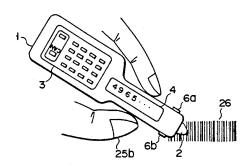
Primary Examiner-Stuart S. Levy Assistant Examiner-Steven M. duBois Attorney, Agent, or Firm-Nixon & Vanderhye

ABSTRACT

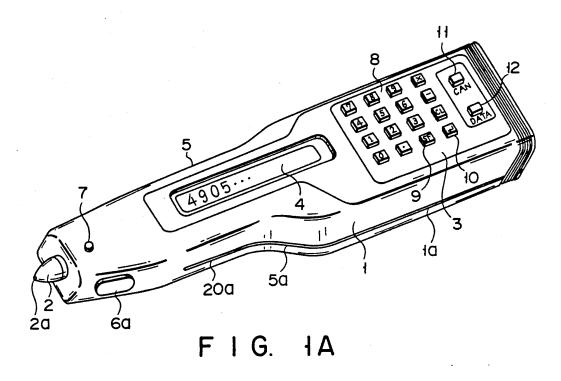
A portable data input apparatus comprises an elongated casing. A pen-scanner type bar code reader reads a bar code provided according to the kind of a commodity, and outputs a corresponding code data unit. A keyboard is designed to input at least a numerical data unit representative of the amount of the commodity. A display device displays the code data unit and the numerical data unit. A display mode changing circuit is designed to invert the image of the data units displayed on the display device in the vertical direction and the horizontal direction, in response to a detection signal, which is output when the code data and numerical data are inversely displayed.

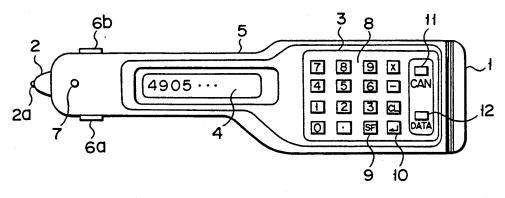
14 Claims, 10 Drawing Sheets



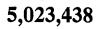


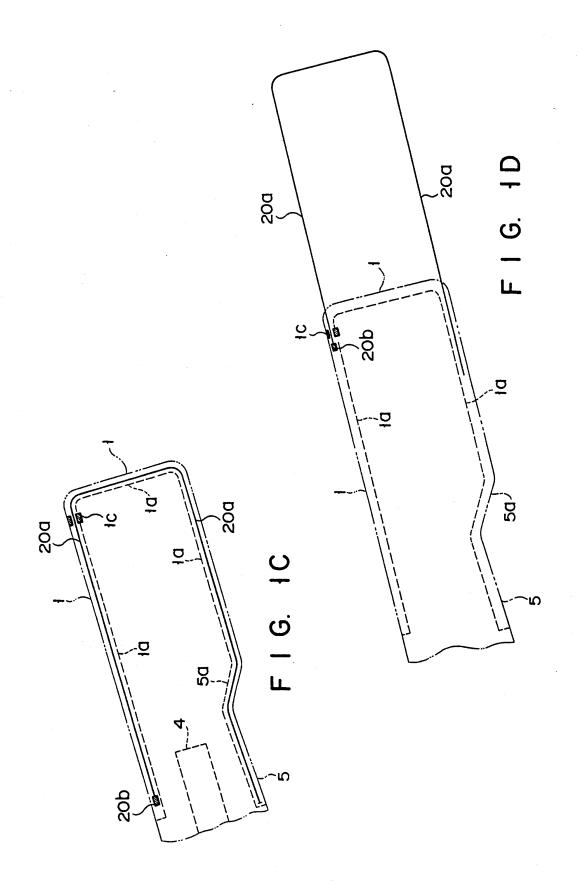


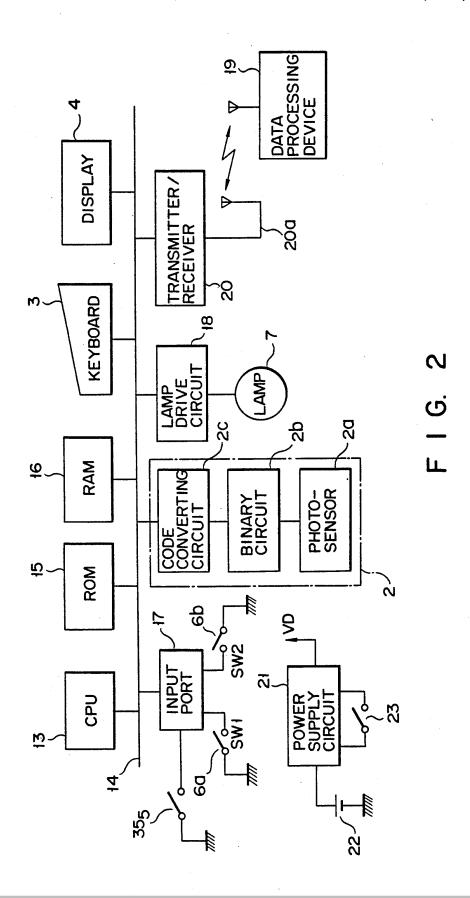




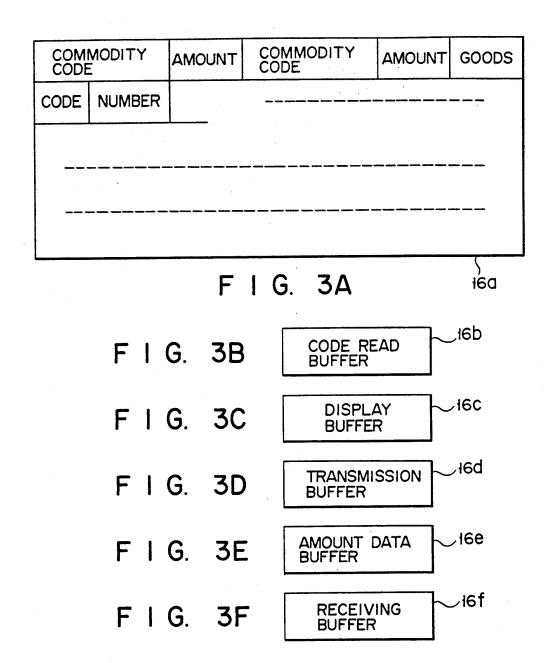
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