

At this point pressing the bear will cause the bear to go "Huff puff" and pressing any word in the dotted rectangle 41 will cause the narrator to say "the gingerbread man ran faster and the bear had to sit down and rest."

Referring once again to FIG. 7, and item 102 in FIG. 10, suppose the child had pressed the green button 26 for "yes" instead of the red button 28 for "no" as previously discussed. This time the question by the narrator would be different. In this version, the narrator would say, "If you want Gingerbread Man to go into the red house, press the green "yes button" 26. Then the child would press the next button 24.

Each choice (either pressing the green button 26 or doing nothing) will take the reader to a different frame which logically continues the story with a different story line. Supposing, after going into the red house, the narrator asks, "If you want the gingerbread man to go up stairs and see what is there; first press the red button and then go to the next page". If the child does not press the red button, the talking machine will skip to another alternative. If the child does press the red button, then the machine will show the page with the story continued upstairs. The use of both the red and green buttons can cause as many as three branches to be effected at the branching page.

There can be very simple stories which are just a series of encounters. These can be selected in various sequences. For example, the child can be asked: "Do you want Brother Rabbit to meet the Wicked Witch?" If YES, press the GREEN button if NO "continue": then the story continues with the wicked witch until another selection is required, if the RED button is pressed, then another encounter is presented, for example, the Good Fairy, which continues until a selection is required.

Not only does the interactive talking picture machine of this invention say what is printed on the page, but it also allows children to try reading themselves. When switched to the "Press and Say" mode, the picture will appear in the frame and it will not be spoken by the characters. If the child tries to read a line on a page and has trouble, he or she can put their finger on any word on the line (i.e., thereby actuating the membrane key pad), and the machine will say that line. Children can press one or every line in or out of order and it will say the line when pressed. This is accomplished by the display platform switch matrix which is located behind the cartridge 21. If a key for a line or sentence is pressed, then it will be spoken.

The interactive talking picture machine is not limited to spoken words. For example, if there is a cow shown on the page, an added feature is that by pressing a finger on the cow, it goes "MOO". In the automatic mode, it will occur only after the text is spoken. In the Press and Say mode, it occurs at any time. In some cases, especially for the youngest children, this Press and Say feature can be the major part of the story. The text can ask:

"What does the COW say? Press him too!" And then with the next picture:

"What does the OWL say? Does he say MOO?"

At the end of every story, there may be a question page. On this page the narrator asks questions about things that happened during the story. These same questions are also printed on the page. Children may answer YES or NO to each question asked, by pressing the "YES" or "NO" printed on the bottom of the page. The questions can be about the whole story including all its current branches. If a question is answered correctly children are congratulated; if incorrectly, they are told that their answer "is not correct".

Questions and answers can be set up at any point in the

story.

At the end of the story, the cartridge can be pulled out and inserted the other way for a completely new story. There is no need to rewind a cartridge. However, at any desired time, one may wind the pages backwards to reach previous pages. The title page of each story, or collection of stories is also shown on a label on each side of the cartridge.

An alternative embodiment of this invention is depicted in FIGS. 11A and 11B. In this embodiment, a housing 12' is provided having electronics, structural features and controls which are analogous to the housing 12 in the FIG. 1 embodiment. The primary difference between the embodiments of FIGS. 1 and 11 is that FIG. 11 includes a backlit lit display (such as a LCD screen shown at 70 in FIG. 5) in window 14'. In this case, the LCD 70 would be superimposed over the membrane platform 13 so that pressure on the LCD will actuate the underlying key pads 13. Such lighting allows the FIG. 11 embodiment to be well suited for displaying comic books, comic strips, cartoons and the like.

An important feature of the present invention is the ability of the reader to interact with the talking machine in order to alter the story lines of the book (cartridge) being read. This leads to an electronic talking picture machine which offers superior interaction between reader and talking picture book to any electronic books heretofore known. Still another important feature of this invention is the more simplified non-interactive version where the present invention is a reading device characterized by the use of inexpensive replaceable story rolls or cartridges having bar encoded information thereon which is read into a microprocessor stored in an inexpensive housing 12.

Of course, while in a preferred embodiment, the story lines are encoded in bar code format, which is printed on the cartridge story belt; any other means of electronically storing information may be used in connection with this invention. For example, the bar code may be replaced with magnetic tape or a pattern of apertures or notches. However, the bar code storage method is preferred in view of its low cost and low likelihood of becoming damaged.

As previously described, the present invention includes sounds and words of recorded quality. Further, the present invention has the means for the reader to interact with the machine by branching out to different story lines. In addition, the present invention can be used as a reading learning tool and has a question and answer feature to test comprehension and thus may function as a quiz toy.

While preferred embodiments have been shown and described, various modifications and substitutions may be made thereto without departing from the spirit and scope of the invention. Accordingly, it is to be understood that the present invention has been described by way of illustrations and not limitation.

What is claimed is:

1. An electronic interactive talking picture machine comprising:

housing means having a viewing portion comprising a cavity;

display means positionable on said housing means and having information encoded thereon, said display means including a plurality of spaced frames with discrete encoded information being associated with each frame and a selected frame being sequentially movable for viewing in said viewing portion of said housing means;

electronic sensor means in said housing means for reading said encoded information from said display means; and