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described above, two small stepping motors 35 can be used to control a Braille cell of six pins and enable the cell to indicate characters for reading by a blind or visually impaired person.

The eight rotary positions of the cam means corresponding to eight permutations of positions of the three associated pins can be held without continuous supply of power. In particular, the cam means 31 has eight discrete stable rotational increments so that the pin positions are maintained even if power to the display is disconnected.

It will be seen that the preferred embodiment as described and illustrated can provide an effective, relatively simple, low powered Braille display.

Sometimes a Braille display has two additional pins, making eight pins in a four by two array. In this case, the cam cylinder would have sixteen rotary positions at 22.5° angular increments and the eight pins provide a possible character set of 128 characters. The present invention is not limited to the six-pin Braille display but is also applicable to such an eight-pin display.

What I claim is:

1. A Braille display for denoting characters by the positions of at least six movable projections arranged in two parallel columns with each column comprising at least three of said projections, each projection being movable between an elevated position and a lowered position, actuator means for selectively moving each of the projections between its said two positions, the actuator means comprising rotary means having different rotary positions, the rotary means being operatively coupled to the projections to as to effect movements of the said projections, the rotary means in said different rotary positions causing said projections to adopt different predetermined permutations of the elevated and lowered positions of the projections corresponding to respective characters to be denoted by the Braille display, the actuator means further including drive means for selectively rotating the rotary means between its different rotary positions, and wherein the rotary means comprises two cam members having cam profiles, each cam member being associated with a respective column of said projections so that rotation of each cam member effects movements of the associated projections between their elevated and lowered positions depending on the rotary position of the cam member, each cam member having an associated drive means for moving the cam member between its rotary positions.

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2. A Braille display as claimed in claim 1 wherein each projection comprises a pin movable in associated guide means between its elevated position and its lowered position, each pin preferentially adopting its lowered position, each pin having a head in contact with the associated cam member, each cam member having depressions in its profile at predetermined positions around the profile of the cam member, each of the depressions being located so as to register with the head of a respective pin, whereby each head can enter the respective depression to effect movement of the respective pin from its elevated to its lowered position.

3. A Braille display as claimed in claim 2 and further including biasing means associated with each projection and operative to bias the respective projection towards its lowered position, whereby the cam members move each of the projections against the action of the associated biasing means in moving the projection from its lowered position to its elevated position.

4. A Braille display as claimed in claim 1 wherein the drive means for the cam member comprises a stepping motor having a shaft coupled to the respective cam member, the motor having eight rotary positions arranged at angular increments of 45° about the axis of rotation of the shaft, whereby the eight rotary positions of the cam member provide eight different permutations of the positions of the [three] associated projections.

5. A Braille display as claimed in claim 1, 2 or 4 wherein the cam profiles are shaped to ensure that as each drive means is rotating the respective cam member between its rotary positions, only one projection is ever being moved by the cam profiles at any instant.

6. A Braille display as claimed in claim 1 having six movable projections arranged in two parallel columns with each said column comprising three of said projections.

7. A Braille display as claimed in claim 6 and further including two additional projections, each of the two additional projections being located in a respective one of the two columns of projections, the actuator means having rotary positions corresponding to different permutations of possible positions of the eight projections.

8. A Braille display as claimed in claim 1 wherein each cam member comprises a plurality of cam sections, each cam section being operatively associated with a respective one of the projections.

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