

13

wherein said operative surface has a centrally disposed depression formed therein; and wherein said housing includes a positioning finger integral therewith and freely engageable with said depression for maintaining the spacing between said cam means and said reference surface and for defining a center of rotation for said cam means.

13. Tactile display apparatus as set forth in claim 12 including:

means biasing said follower end into engagement with said operative surface.

14. Tactile display apparatus as set forth in claim 13 wherein said biasing means includes:

an annular shoulder on said pin intermediate said follower end and said tip end and lying in a plane substantially perpendicular to said longitudinal axis; and

a compression spring encircling said pin and extending between said annular shoulder and said cover.

15. Tactile display apparatus as set forth in claim 7 including:

means biasing said follower end into engagement with said operative surface.

16. Tactile display apparatus as set forth in claim 15 wherein said biasing means includes:

an annular shoulder on each of said pins intermediate said follower end and said tip end and lying in a plane substantially perpendicular to said longitudinal axis; and

a compression spring encircling each of said pins and extending between said annular shoulder and said cover.

17. Tactile display apparatus as set forth in claim 7 wherein said housing includes positioning means freely engageable with each of said cam means for maintaining the spacing between each of said cam means and said reference surface and for defining a center of rotation for each of said cam means.

18. Tactile display apparatus comprising:

a housing having a plurality of cavities therein and defining a reference surface and having a plurality of apertures therein for communication between each cavity and said reference surface;

an electromagnet fixed to said housing within each of the cavities, each said electromagnet being spaced from said reference surface and having first and second spaced poles of opposite, selectively reversible, polarity;

rotatable cam means proximate to each of said electromagnets, each of said cam means having an axis of rotation transverse to said reference surface and

14

including an integral permanent magnet with third and fourth spaced poles of opposite polarity equidistant from said axis of rotation, each of said cam means being rotatable between an active position at which said third and fourth poles, respectively, are attracted to and positioned adjacent said first and second poles and an inactive position at which said fourth and third poles, respectively, are attracted to and positioned adjacent said first and second poles; and

a touch pin associated with each of said cam means and having a longitudinal axis transverse to said reference surface, each of said touch pins including a follower end engageable with said cam means and a tip end distant from said follower end, said touch pin being movable on said cam means between a first position raised above said reference surface when said cam means is in said active position and a second position no higher than said reference surface when said cam means is in said inactive position, the aperture being sized and positioned to freely receive said touch pin there-through.

19. Tactile display apparatus as set forth in claim 18 wherein said housing includes:

an integral roof positioned so as to overlie all of the cavities therein, said roof defining said reference surface and having therein a plurality of apertures for communication between each of the cavities and said reference surface;

wherein said reference surface is substantially planar; and

wherein said axis of rotation of each of said cam means and said longitudinal axis of each of said touch pins are both perpendicular to said reference surface.

20. Tactile display apparatus as set forth in claim 19 wherein each of said cam means is generally disk-shaped, has a planar base surface which is substantially parallel to said reference surface, and has an opposed contoured operative surface which ranges between an elevated region of maximum height above said base surface and a nominal region of minimum height above said base surface; and

wherein each of said pins assumes said first position when said follower end is engaged with said elevated region of its associated said cam means and assumes said second position when said follower end is engaged with said nominal region thereof.

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