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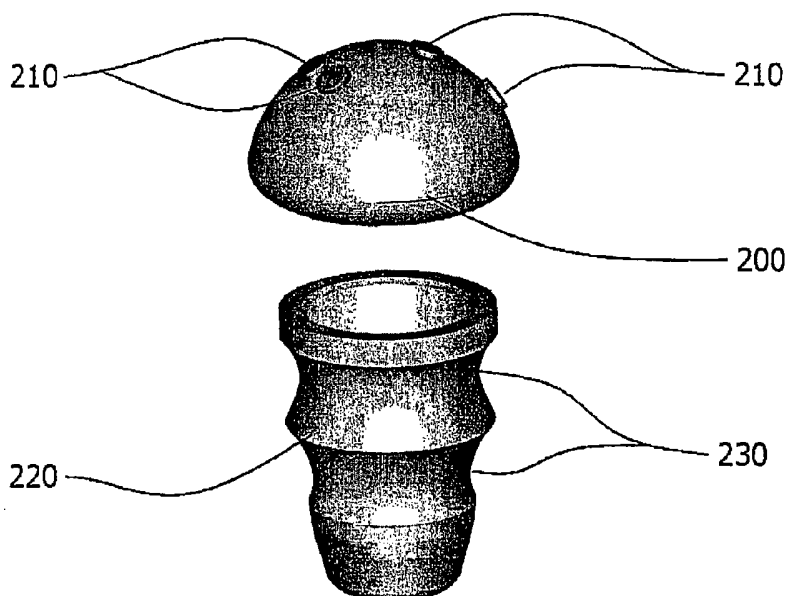
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[Continued on next page]

(54) Title: AN ERGONOMIC HAND-HELD COMPUTER INPUT AND CONTROL DEVICE



(57) Abstract: A hand-held computer input and control device (100) designed to be held in the palm of a relaxed free floating hand, wherein the device is balanced for use with the user's thumb, 1st and/or 2nd fingers. In one exemplary embodiment, a hand held structure having general radial symmetry, for use in multi-button (21) three dimensional computer control applications, consisting of a mushroom like head (200) with multiple buttons (21) placed such that the thumb, first, or second fingers can easily control them, and a separate cylindrical body (220) with two grooves (230) and optional buttons positioned for grasping by the third and fourth fingers is provided.

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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U.S. : 345/ 156, 157, 158, 161

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,512,892(CORBAALLIS et al) 30 April 1996 (30.04.1960), columns 2-4; figures 1A-1B and 3-4	1-18, 20, 22-23, 29-30, 34-37, 39-40 ----- 19, 21, 24-28, 31-33 19
Y	US 6,262,712B1 (OSBORNE et al) 17 July 2001 (17.07.2001), column 10, lines 10-21.	21, 26
Y	US 5,982,356 (AKIYAMA) 09 November 1999 (09.11.1999), Abstract and figure 1.	24-25
Y	US 4,445,011 (HANSEN) 24 April 1984 (24.04.1984), column 2, lines 30-65 and figure 4.	31-32
Y	US 4,924,216 (LEUNG) 08 MAY 1990 (08.05.1990), figure 2	33
Y	US 20020196619A1 (CHOU) 26 December 2002 (26.12.2002), Abstract and figure 1.	38
Y	US 6,128,002 (LEIPER) 03 October 2000 (03.10.2000), figure 1.	



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