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Narayanaswami

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(54) BEZEL BASED INPUT MECHANISM AND USER INTERFACE FOR A SMART WATCH

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patent is extended or adjusted under 35

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(56)

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(51) **Int. Cl.**⁷ **G09G 5/00**; G04C 17/00

835, 839, 832, 853, 854, 964, 173, 174; 368/251, 244, 246, 248, 243, 10, 109, 247, 250, 262, 263, 267, 69, 295

References Cited
U.S. PATENT DOCUMENTS

| 6,414,907 | B1 | * | 7/2002 | Pennington | 3 | 68/10 |
|-----------|----|---|--------|------------|----|-------|
| 6.443.614 | R1 | * | 9/2002 | Read | 36 | 2/221 |

OTHER PUBLICATIONS

"The World's Smallest PDA Computer Watch", Hammacher Schlemmer Mid Summer 2000 Catalog, p. 3.

* cited by examiner

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Assistant Examiner—Peng Ke
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Presser; Gail H. Zarick, Esq.

(57) ABSTRACT

A wearable mobile computing device/appliance (e.g., a wrist watch) with a high resolution display that is capable of wirelessly accessing information from the network and a variety of other devices. The mobile computing device/appliance includes a user interface employing a bezel-based input mechanism including a bezel ring which may be rotated and depressed for generating both rotation and wheel click events for enabling navigation, selection and entry of various displayed textual and graphical items.

42 Claims, 5 Drawing Sheets

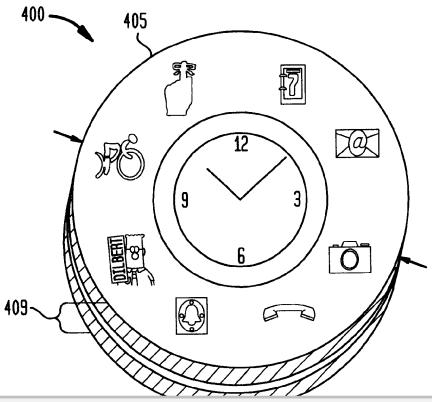
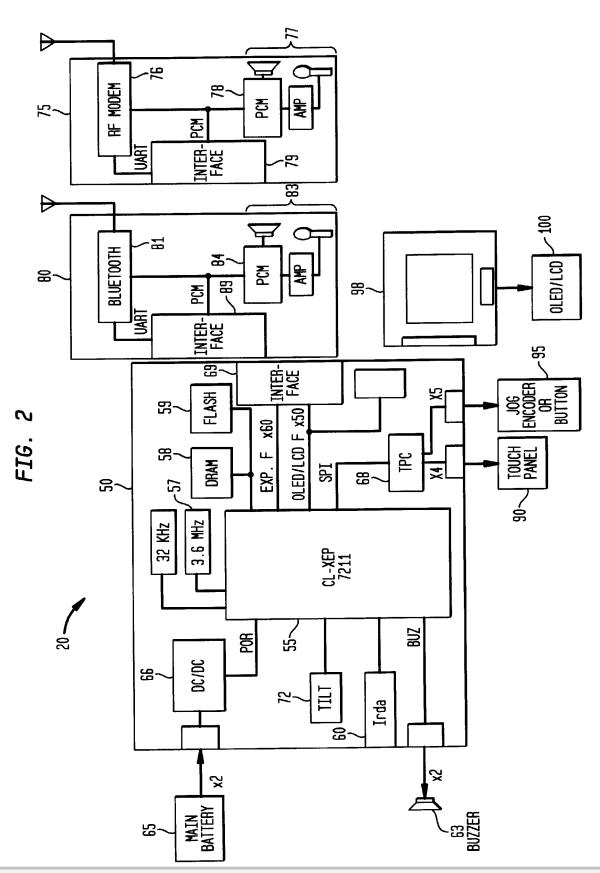


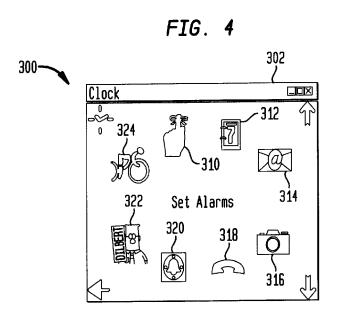


FIG. 1 Safety improvement -Brain tumor -Safety driving GSM Devices Phone 10. -GPS 25c -Cellular phone Devices VisionPad-2 -GPS/Compass -Thermometer r¦¦ bt -Barometer -Altimeter -Trekking counter Expanded function shell Thinkpad Watch Pad Touch screen Basic Device Buttons • Integrated I/F Hands-free Mobile Shell Device support 25b DOA' Touch screen Thick battery BatteryExternal I/F Scroll/Pointing device Buttons IrD A (RF) Dock Touch screen Bluetooth (RS232C) Scroll/Pointing device . Microphone/Speaker USB/Parallel/Serial Buttons Thick battery Touch Sensor Basic Shell mic/speaker RS232C Touch screen Thin battery Serialbus I/F FIG. 3 SCENARIOS AND INTERACTIONS 280~ 200 PIM Watch Alerts etc 275~ SHELL APPLICATION SOFTWARE COMM. MGR POWER MGR UI MGR IR. RF 260 270⁻ **BOOT** 255-LOADER 250 230 240 210 LINUX 2.2.1 -229 TILT **SENSOR** IR RF BLUE ROLLER **SERIAL** TOUCH LCD OLED MODEM T00TH **FLASH** 214 218~ 220 224 228 222 226 212









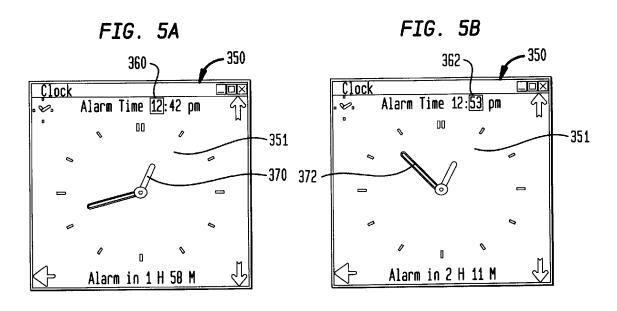


FIG. 6A

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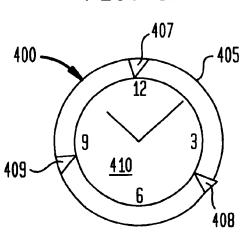


FIG. 6B

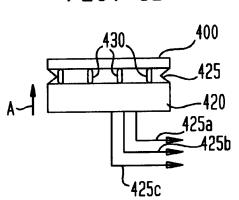
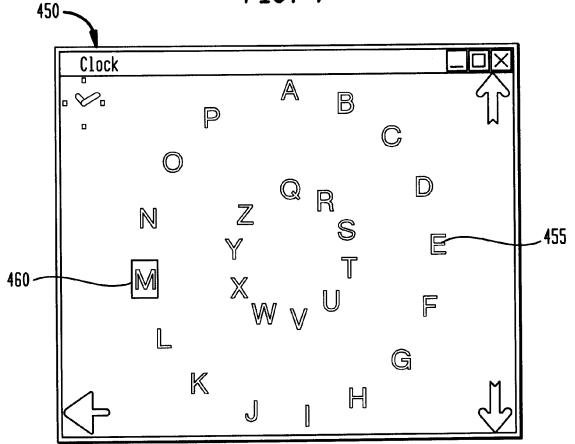


FIG. 7





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