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(71) Applicant: Z-KAT INC. [US/US]; 2903 Simms Street, Hollywood, FL 33020 (US).

(72) Inventors: ABOVITZ, Rony, A.; 3825 Taft Street, Hollywood, FL 33021 (US). TAPIA, William, F.; 2590 English Ivy Court, Longwood, FL 32779 (US). FRECHETTE, Robert, F.; 630 SW 5th Avenue, Fort Lauderdale, FL 33315 (US).

(74) Agent: KOCOVSKEY, Thomas, E., Jr., Esq.; Fay, Sharpe, Fagan, Minnich & Mckee, LLP, 1100 Superior Avenue, Seventh Floor, Cleveland, OH 44114-2518 (US).

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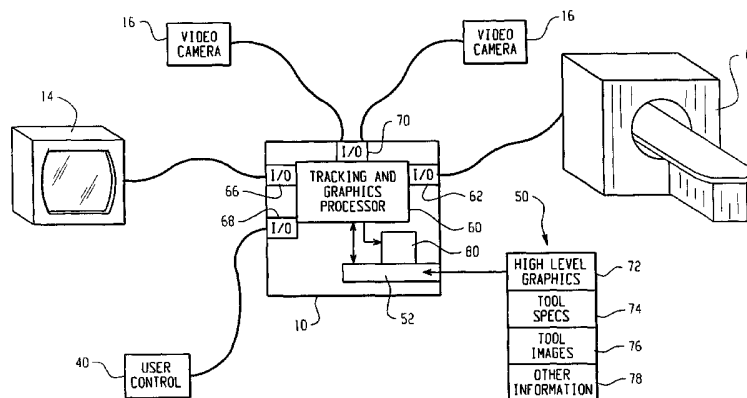
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(54) Title: DIGITAL MEDIUM ENHANCED IMAGE-GUIDED PROCEDURE SYSTEM AND METHOD



(57) Abstract: A software-integrated disposable kit (20) contains a series of sterile packages which hold instrumented tools (26, 28, 30), accessories (42, 44, 46) which are implanted or used during a procedure, peripherals (40) e.g., mouse, keyboard, etc., for a user input control (34) for controlling a computer (10), markers (32) which are tracked by a tracking system (16), all in sterile condition, and a one time use digital medium (50). When an image-guided procedure is to be performed, the digital medium is inserted into the computer (10) and the user interface is displayed. The digital medium stores a portion of the software which, in combination with software on the computer, provides all of the software necessary for full user functionality, which includes display of selected diagnostic image information, tracking of the instruments, and superimposition of the virtual representations of the tools on the images, descriptions, specifications and characteristics of the specific tools in the kit, and 3D virtual representations or images of the instrumented tools for wire frame or rendered display of the tools (14). At the end of a procedure, the digital medium is deactivated or encrypted (80). The digital medium and the used tools are then disposed of without reuse. The system allows the user to save relevant information obtained from the procedure, e.g., images, notes, etc. on the digital medium which is encrypted against reuse and archived.

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INTERNATIONAL SEARCH REPORT

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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
Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F

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 practical, search terms used)
EPO-Internal, WPI Data, PAJ, IBM-TDB, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 119 886 A (CII HONEYWELL BULL) 26 September 1984 (1984-09-26) page 1, line 1 -page 6, line 24 page 2, line 1 -page 2, line 29 page 14, line 22 -page 16, line 10 ---	1, 20, 28, 30
A	US 5 138 712 A (CORBIN JOHN R) 11 August 1992 (1992-08-11) column 1, line 1 -column 3, line 24 ---	1-31
A	US 5 553 143 A (TAYLOR NEIL W ET AL) 3 September 1996 (1996-09-03) column 1, line 1 -column 2, line 17 -----	1-31

Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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