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[Continued on next page]

(54) Title: 3D CONNECTED SHADOW MOUSE POINTER

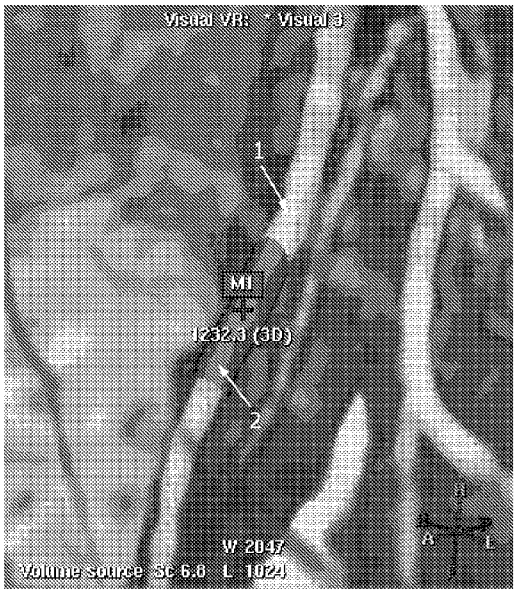


FIG. 2

(57) Abstract: The invention relates to a system (100) for determining a feedback on a three- dimensional location of a pointer in a three-dimensional region of image data, the system comprising: a display unit (110) for computing a view of the three-dimensional region for displaying on a display; a pointer unit (115) for computing a two-dimensional location of the pointer on the view of the three-dimensional region, based on a pointer location input; a location unit (120) for computing a three-dimensional location in the three-dimensional region, based on a two-dimensional location on the view of the three-dimensional region; and a shadow unit (125) for determining a set of two-dimensional locations for displaying a shadow on the view of the three-dimensional region, wherein the set of two-dimensional locations for displaying the shadow comprises the two-dimensional location of the pointer on the view of the three-dimensional region, and wherein a set of three-dimensional locations, computed based on the set of two-dimensional locations for displaying the shadow, is connected. Typically, the connected set of candidate three-dimensional locations comprising the three-dimensional location of the pointer is comprised in a structure indicated by the pointer. Therefore, the determined feedback on a three-dimensional pointer location on a view of the three-dimensional region of the image data improves clarity and decreases ambiguity of indicating a 3D location on the structure.

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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)
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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	VENOLIA D ED - ASHLUND S ET AL: "Facile 3D Direct Manipulation" BRIDGES BETWEEN WORLDS. AMSTERDAM, APR. 24 - 29, 1993; [PROCEEDINGS OF THE CONFERENCE ON HUMAN FACTORS IN COMPUTING SYSTEMS. (INTERCHI)], READING, ADDISON WESLEY, US, vol. -, 24 April 1993 (1993-04-24), pages 31-36,547, XP002254194 page 33, right-hand column ----- -/--	1-10

[X] Further documents are listed in the continuation of Box C.

[ ] See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	COHEN M F ET AL: "VOLUME SEEDLINGS" PROCEEDINGS OF THE SYMPOSIUM ON INTERACTIVE 3D GRAPHICS. CAMBRIDGE, MA., MAR. 29 - APR. 1, 1992; [PROCEEDINGS OF THE SYMPOSIUM ON INTERACTIVE 3D GRAPHICS], NEW YORK, ACM, US, vol. -, 29 March 1992 (1992-03-29), pages 139-145, XP000308188 the whole document ----	1-10
A	DATABASE INSPEC [Online] THE INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB; 1994, HINCKLEY K ET AL: "A survey of design issues in spatial input" XP002487362 Database accession no. 5273736 abstract page 217 -& PROCEEDINGS OF UIST'94. USER INTERFACE SOFTWARE AND TECHNOLOGY 2-4 NOV. 1994 MARINA DEL REY, CA, USA, 4 November 1994 (1994-11-04), pages 213-222, XP002487361 UIST '94. Seventh Annual Symposium on User Interface Software and Technology. Proceedings of the ACM Symposium on User Interface Software and Technology ACM New York, NY, USA ISBN: 0-89791-657-3 ----	1,5,9,10