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DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
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[Continued on next page]

(54) Title: FREQUENCY-DEPENDENT RAY TRACING THROUGH AN INTERFACE

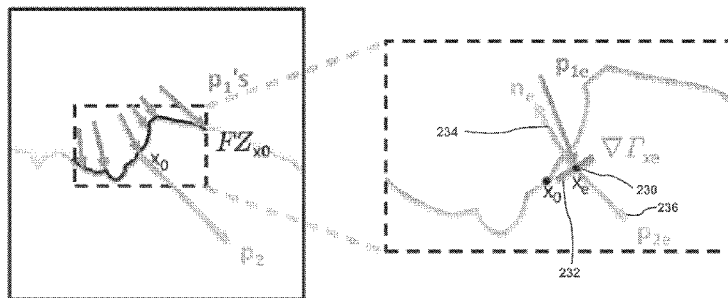


Figure 2E

(57) Abstract: Computing systems and methods for improving processing of collected data are disclosed. In one embodiment, while ray-tracing through a sub-surface region, a frequency-dependent outgoing ray direction is computed from a point on an interface disposed in the sub-surface region when the ray tracing is at the interface.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/031378**A. CLASSIFICATION OF SUBJECT MATTER*****G01V 1/22(2006.01)i, G01V 1/28(2006.01)i, G06F 19/00(2011.01)i***

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)

G01V 1/22; G06F 19/00; G06G 7/48; G01V 1/28; G01V 1/40; G01V 1/00

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)

eKOMPASS(KIPO internal) & Keywords:ray, tracing, subsurface, boundary, frequency, direction, normals, parameter, integral and similar terms.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 7095678 B2 (WINBOW, G. A. & CLEE, T. E.) 22 August 2006 See the whole document.	1-20
A	US 6763305 B2 (BERNITSAS, N.) 13 July 2004 See the whole document.	1-20
A	US 7447114 B2 (DUBOSE, JR. J.) 04 November 2008 See the whole document.	1-20
A	US 2003-0208321 A1 (MARTINEZ, R. & SUN, C.) 06 November 2003 See the whole document.	1-20

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"&" document member of the same patent family

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Information on patent family members

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