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[Continued on next page]

(54) Title: EVALUATING SURFACE DATA

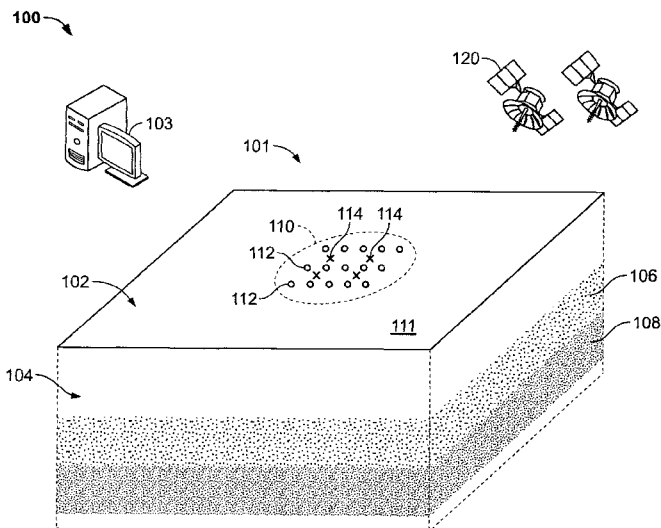


FIG. 1A

(57) Abstract: Systems, methods, and instructions encoded in a computer-readable medium can perform operations related to evaluating surface data. Geodetic data for a plurality of surface locations are received. The geodetic data may include surface gradient information and/or surface elevation information for multiple surface locations. A set of constraining relationships is generated based on the geodetic data. The set of constraining relationships relates undetermined values of surface elevation movement and/or undetermined values of surface gradient movement to measured surface elevation changes and/or measured surface gradient changes. Some or all of the constraining relationships include multiple undetermined values. Particular values for surface elevation movements and/or particular values for surface gradient movements are calculated for multiple surface locations based on determining a solution to the set of constraining relationships. In some implementations, a minimum curvature surface may be generated deterministically based on the geodetic data and the particular values identified using the constraining relationships.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
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ADD.  
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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 practicable, search terms used)  
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LO C P; YEUNG A K W: "Concepts and techniques of geographic information systems passage", 1 January 2002 (2002-01-01), PRENTICE HALL, US, USA, XP002677105, ISBN: 0-13-080427-4 pages 306, 313 page 328 figure 9.1 Document consists of pages 306-309,313,328-331 -----	1-33

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

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