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(54) **SYSTEM AND METHOD FOR RAPID DETERMINATION OF VISIBILITY-BASED TERRAIN PROPERTIES OVER BROAD REGIONS**

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(58) **Field of Search** 382/113, 103, 382/106, 154; 455/456, 457

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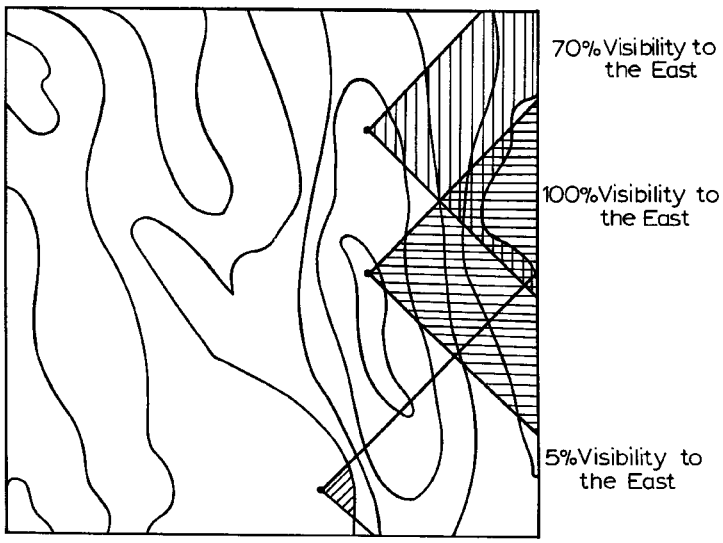
(57) **ABSTRACT**

A system and method for rapidly obtaining information about the suitability of terrain to meet concealment or visibility objectives, such as might be needed for military planning or for determining placement of relay antennas in a cellular communication system, is disclosed. The disclosed system precomputes heuristic visibility fields for a geographic area, then uses the precomputed heuristic visibility fields to rapidly determine points on a map that will provide the desired characteristics of exposure or concealment in response to a query.

18 Claims, 6 Drawing Sheets