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(54) Title: HORIZONTAL MECHANICALLY STABILIZING GEOGRID WITH IMPROVED GEOTECHNICAL INTERACTION

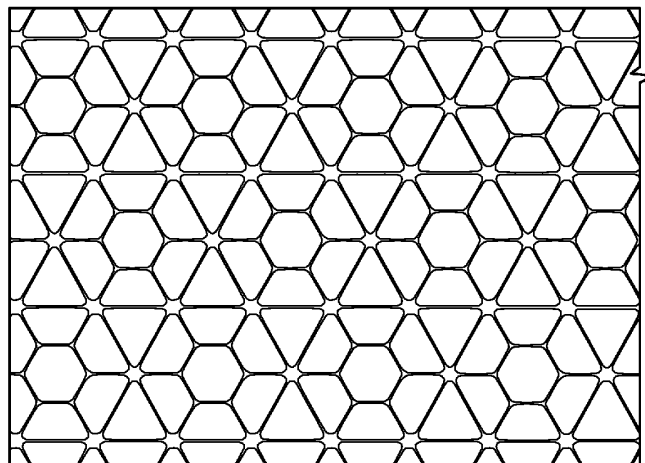


FIG. 1A

(57) Abstract: Aspects of a geogrid system for improving substrate interactions within a geotechnical environment is disclosed. In one aspect features of a geogrid system aid in trapping and restraining aggregate and soil. In one aspect a geotechnical environment is configured with a horizontal multilayer mechanically stabilizing geogrid. In said aspect the geogrid is extruded with a polymeric material and a compressible cellular layer. In said aspect, the horizontal multilayer mechanically stabilizing geogrid is comprised of either a cap or a core of polymeric material or is further comprised of at least one compressible cellular layer configured to the polymeric material. Further, the horizontal multilayer mechanically stabilizing geogrid is configured with a triangle or triaxial geometry with patterned discontinuities and a plurality of strong axes. Said configuration increases soil and aggregate trapping while reducing polymeric use.

[Continued on next page]

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