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(54) Title: GRAPHENE-COATED DIAMOND PARTICLES, COMPOSITIONS AND INTERMEDIATE STRUCTURES COMPRISING SAME, AND METHODS OF FORMING GRAPHENE-COATED DIAMOND PARTICLES AND POLYCRYSTALLINE COMPACTS

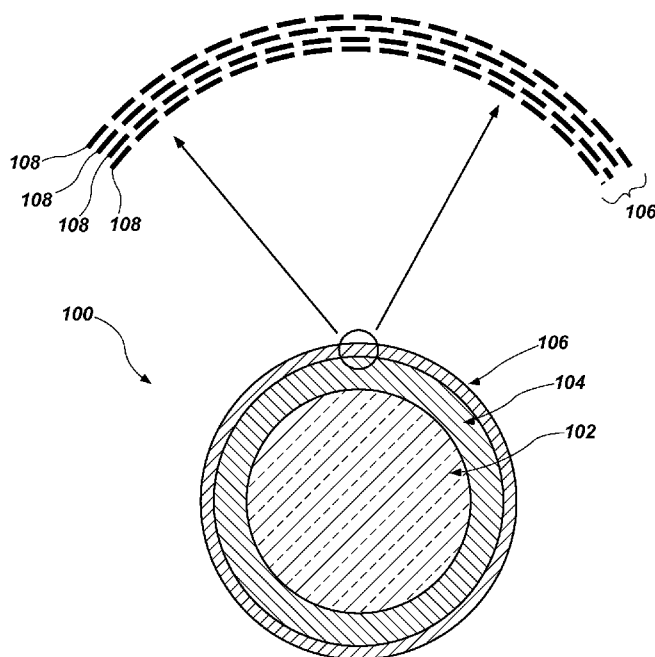


FIG. 1

(57) Abstract: Coated diamond particles have solid diamond cores and at least one graphene layer. Methods include coating diamond particles with a charged species and coating the diamond particles with a graphene layer. A composition includes a substance and a plurality of coated diamond particles dispersed within the substance. Each coated diamond particle has a diamond core and at least one graphene layer formed over at least a portion of the diamond core.



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