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(54) **Title:** METHODS OF FABRICATING POLYCRYSTALLINE DIAMOND, AND CUTTING ELEMENTS AND EARTH-BORING TOOLS COMPRISING POLYCRYSTALLINE DIAMOND

(57) **Abstract:** Methods of fabricating polycrystalline diamond include functionalizing surfaces of carbon-free nanoparticles with one or more functional groups, combining the functionalized nanoparticles with diamond nanoparticles and diamond grit to form a particle mixture, and subjecting the particle mixture to high pressure and high temperature (HPHT) conditions to form inter-granular bonds between the diamond nanoparticles and the diamond grit. Cutting elements for use in an earth-boring tool includes a polycrystalline diamond material formed by such processes. Earth-boring tools include such cutting elements.

