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(54) Title: FINE GRAINED POLYCRYSTALLINE ABRASIVE MATERIAL

(57) Abstract: Polycrystalline diamond abrasive elements having a fine grained microstructure are produced from fine grained diamond particles and a catalyst solvent material, at least a portion of which is in the form of nanosized particles. The abrasive elements exhibit high homogeneity and exhibit significant increases in toughness and improved wear resistance.

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