

Title (en)

POLYCRYSTALLINE DIAMOND COMPACTS, AND RELATED METHODS AND APPLICATIONS

Title (de)

POLYKRISTALLINE DIAMANTPRESSLINGE, ZUGEHÖRIGE VERFAHREN UND ANWENDUNGEN

Title (fr)

PASTILLES EN DIAMANT POLYCRISTALLIN, PROCÉDÉS ET APPLICATIONS ASSOCIÉS

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Application

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Abstract (en)

[origin: WO2016161304A1] Embodiments relate to polycrystalline diamond compacts ("PDCs") including a polycrystalline diamond ("PCD") table in which a metal-solvent catalyst is alloyed with at least one alloying element to improve thermal stability and/or wear resistance of the PCD table. In an embodiment, a PDC includes a substrate and a PCD table bonded to the substrate. The PCD table includes diamond grains defining interstitial regions. The PCD table includes an alloy comprising at least one Group VIII metal and at least one metallic alloying element such as phosphorous.

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