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(54) Title: POLYCRYSTALLINE COMPACTS INCLUDING METALLIC ALLOY COMPOSITIONS IN INTERSTITIAL SPACES BETWEEN GRAINS OF HARD MATERIAL, CUTTING ELEMENTS AND EARTH-BORING TOOLS INCLUDING SUCH POLYCRYSTALLINE COMPACTS, AND RELATED METHODS

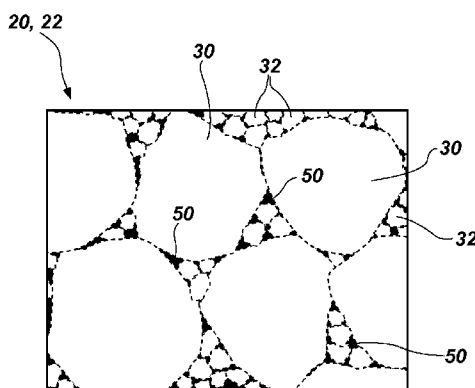


FIG. 3

(57) Abstract: Polycrystalline compacts include a polycrystalline material comprising a plurality of inter-bonded grains of hard material, and a metallic material disposed in interstitial spaces between the inter-bonded grains of hard material. At least a portion of the metallic material comprises a metal alloy that includes two or more elements. A first element of the two or more elements comprises at least one of cobalt, iron, and nickel. A second element of the two or more elements comprises at least one of dysprosium, yttrium, terbium, gadolinium, germanium, samarium, neodymium, and praseodymium. The metal alloys may comprise eutectic or near-eutectic compositions, and may have relatively low melting points. Cutting elements and earth-boring tools include such polycrystalline compacts. Methods include the formation of such polycrystalline compacts, cutting elements, and earth-boring tools.

