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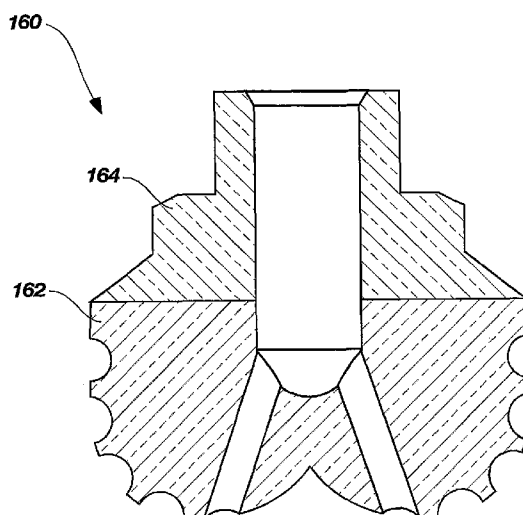
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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: EARTH-BORING ROTARY DRILL BITS AND METHODS OF FORMING EARTH-BORING ROTARY DRILL BITS



(57) Abstract: Methods of forming earth-boring rotary drill bits (50) include providing a bit body (52), providing a shank(70) that is configured for attachment to a drill string, and attaching the shank to the bit body. Providing a bit body includes providing a green powder component having a first region (54) having a first composition and a second region (56) having a second, different composition, and at least partially sintering the green powder component. Other methods include providing a powder mixture, pressing the powder mixture to form a green component, and sintering the green component to a final density. A shank(70) is provided that includes an aperture (72), and a feature(60) is machined in a surface of the bit body. The aperture is aligned with the feature, and a retaining member (80) is inserted through the aperture. An earth-boring bit includes a bit body comprising a particle-matrix composite material including a plurality of hard particles dispersed throughout a matrix material. A shank is attached to the bit body using a retaining member.

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