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(54) **NON-TOXIC PRIMER MIX**

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D03D 43/00	(2006.01)
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(58) **Field of Classification Search**
USPC 149/22, 37, 45, 61, 108.6
See application file for complete search history.

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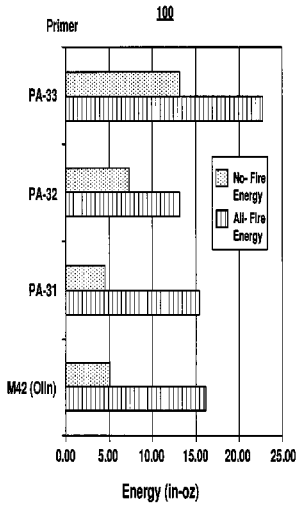
(57) **ABSTRACT**

A non-toxic primer mix in which DBX-1 (copper(I) 5-nitrotetrazole) acts as the primary explosive portion of the primer. Furthermore, in this mix, boron carbide (B_4C) replaces the traditional frictionator/fuel, toxic antimony trisulfide. In addition, potassium nitrate replaces the toxic barium nitrate ($BaNO_3)_2$) as the oxidizer, providing an ignition flame from the primer in a pyrotechnic reaction. The non-toxic primer therefore embodies a lead-free, barium-free, antimony-free explosive material that can include added fuels, sensitizers, explosives and/or binders.

7 Claims, 2 Drawing Sheets