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[54] RANGE CLEARANCE BY ENHANCING OXIDATION OF FERROUS ORDNANCE IN-SITU

[75] Inventor:

[73] Assignee: The United States of America as represented by the Secretary of the Navy, Washington, D.C.

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[58] Field of Search ..... 89/1 R, 1 M; 102/406, 102/426; 86/1 B; 204/147, 148, 196, 197

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Primary Examiner—Peter A. Nelson

Attorney, Agent, or Firm—Robert F. Beers; Kenneth E. Walden

[57] ABSTRACT

A method of clearing a target range or other area of buried unexploded ordnance (UXO) by advancing natural galvanic electrochemical corrosion whereby ferrous parts of the UXO is simply rusted away at an accelerated rate and rendered harmless within 5 to 10 years in a safe manner and at substantially reduced cost. The electrolytic condition of the soil containing the UXO is preferably enriched. The soil may be saturated with a liberal amount of salt water or other electrolytic chemicals for establishing a corrosive bed several feet below the surface and a dc voltage applied across the soil to enhance stray current corrosion. The galvanic action of the soil electrolyte may be further enhance by elevating its temperature such as by selective covering with black plastic sheets.

17 Claims, 2 Drawing Figures