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(54) **BIODEGRADABLE METAL ALLOYS**

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See application file for complete search history.

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(57) **ABSTRACT**

The invention relates to biodegradable, metal alloy-containing compositions, methods for their preparation and applications for their use. The compositions include magnesium and other components, such as yttrium, calcium, silver, cerium, and zirconium; or zinc, silver, cerium, and zirconium; or aluminum, zinc, calcium, manganese, silver, yttrium; or strontium, calcium, zinc. The compositions are prepared by vacuum induction/crucible melting together the components and casting the melted mixture in a preheated mild steel/copper mold. In certain embodiments, the compositions of the invention are particularly useful for forming medical devices for implantation into a body of a patient.

14 Claims, No Drawings