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(54) **ORDERED ALLOY MAGNETIC TUNNEL JUNCTION WITH SIMPLIFIED SEED STRUCTURE**

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(57) **ABSTRACT**

Magnetic tunnel junction pillars including ordered alloy, bottom free layers are formed using simplified seed structures including textured magnesium oxide. The seed structures can have relatively small thicknesses, thereby reducing roughness of layers formed above the seed structures and facilitating magnetic tunnel junction pillar formation from multi-layer films including such seed structures.

