

Title (en)
ALUMINUM NITRIDE SURFACED COMPONENTS

Title (de)
TEILE MIT ALUMINIUMNITRIDOBERFLÄCHE

Title (fr)
PIECES A SURFACE EN NITRURE D'ALUMINIUM

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EP 1119647 A2 20010801 (EN)

Application
EP 98964082 A 19981218

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Abstract (en)
[origin: WO9932677A2] New and improved automobile and light truck components are disclosed. Specifically, certain components traditionnally made from steel, sometimes hardened steel, such as cylinder liners, various valve train components, clutch discs, brake rotors and brake caliper pistons can now be made from aluminum based materials, thereby saving considerable weight. An aluminum/aluminum nitride metal matrix composite material is provided on the contacting or wear surfaces to provide adequate abrasion resistance, yet protect the engaging component from being excessively worn. The metal matrix composite layer can be applied to an aluminum based metal matrix composite substrate or to an unreinforced aluminum substrate. The A1/A1N surface is also easier to machine than most metal matrix composite materials.

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