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(72) Inventors:

- **MASUHARA, Shinya**
Hamamatsu-shi, 432-8611 (JP)
- **KAWANAKA, Shimpei**
Hamamatsu-shi, 432-8611 (JP)
- **FUJITA, Masahiro**
Hamamatsu-shi, 432-8611 (JP)

(74) Representative: **Henkel & Partner mbB**

Patentanwaltskanzlei, Rechtsanwaltskanzlei
Maximiliansplatz 21
80333 München (DE)

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(71) Applicant: **Suzuki Motor Corporation**
Hamamatsu-shi, Shizuoka 432-8611 (JP)

(54) **METHOD FOR PRODUCING LAYERED FILM STRUCTURE AND PISTON FOR INTERNAL COMBUSTION ENGINE**

(57) [Problem to be Solved]

To provide a method for producing a layered film structure wherein a smooth anodized film or chemical conversion film is formed on a surface of an alloy member without being affected by a precipitated phase contained in the alloy member, and a piston for an internal combustion engine.

[Solution]

The production method of the present invention includes the steps of: forming a pure metal layer on a surface of an alloy member; and conducting an anodizing treatment or a chemical conversion treatment on the pure metal layer to obtain a layered film structure having the alloy member and a film formed on the surface thereof. The piston for an internal combustion engine of the present invention has this layered film structure, wherein an interface between the alloy member and the film is linear at a cross section of the layered film structure or a precipitated phase is present in the interface and the interface is linear at the cross-section of the layered film structure except a portion where the precipitated phase

is present.

FIG.13B

