

Title (en)

Process for carburizing carburisable work pieces under the action of plasma-pulses

Title (de)

Verfahren zum Aufkohlen von Bauteilen aus kohlungsfähigen Werkstoffen mittels einer impulsförmig betriebenen Plasma-entladung

Title (fr)

Procédé pour la carburation de pièces carburables par des impulsions à plasma

Publication

**EP 0695813 B1 19990908 (DE)**

Application

**EP 95109082 A 19950613**

Priority

DE 4427902 A 19940806

Abstract (en)

[origin: US5558725A] Workpieces of carburizable materials, especially steels, are carburized by means of a pulsed plasma discharge in a carbon-containing atmosphere at pressures of 0.1-30 mbars and at pulsed voltages of 200-2,000 V, preferably of 300-1,000 V. A continuously applied baseline voltage, which is below the breakdown voltage, is superimposed on the pulsed voltage. The baseline voltage is preferably a direct-current voltage, which is in the range of 10-150 V, preferably of 20-100 V.

IPC 1-7

**C23C 8/36**; **C23C 8/38**

IPC 8 full level

**C23C 8/36** (2006.01); **C23C 8/38** (2006.01)

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**US 5558725 A 19960924**; AT E184329 T1 19990915; DE 4427902 C1 19950330; DE 59506771 D1 19991014; EP 0695813 A2 19960207; EP 0695813 A3 19970212; EP 0695813 B1 19990908; JP H08170162 A 19960702

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