

Title (en)
Boriding agent

Title (de)
Boriermittel

Title (fr)
Agent de boruration

Publication
EP 0971047 B1 20030108 (DE)

Application
EP 99111057 A 19990615

Priority
DE 19830654 A 19980709

Abstract (en)
[origin: EP0971047A1] A metal boriding agent, including a potassium fluoroborate activator containing calcium fluoride, is new. A metal boriding agent comprises, apart from a boron source and an inert refractory diluent, 1-5 wt. % potassium fluoroborate and 5-40 wt. % calcium fluoride as activator. An Independent claim is also included for production of single phase Fe₂B-containing boride layers on ferrous metal workpieces by covering the workpiece surface with the above boriding agent and heat treating at 800-1100 degrees C. Preferred Features: The boriding agent comprises (by wt.) 3-5 (especially 4)% boron carbide, 2-4 (especially 2.5)% potassium fluoroborate, 10-30 (especially 25)% calcium fluoride and 61-85 (especially 68.5)% silicon carbide.

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C23C 8/70

IPC 8 full level
C23C 8/68 (2006.01); **C23C 8/70** (2006.01)

CPC (source: EP US)
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