

Title (en)  
COMPOSITE ALLOY STEEL POWDER AND SINTERED ALLOY STEEL.

Title (de)  
ZUSAMMENGESETZTES LEGIERUNGSSTAHLPULVER UND GESINTERTER LEGIERUNGSSSTAHL.

Title (fr)  
POUDRE D'ACIER ALLIE COMPOSITE ET ACIER ALLIE FRITTE.

Publication  
**EP 0334968 B1 19950208 (EN)**

Application  
**EP 88908393 A 19880930**

Priority  
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• JP 13740088 A 19880606  
• JP 24407487 A 19870930

Abstract (en)  
[origin: EP0334968A1] Improved composite alloy steel powder in which the alloy powder is partially diffused and fixed on the surface of the iron particles. The alloy steel contains as components Ni (0.50-3.50 wt.%), Mo (0.65-3.50 wt.%), Fe and impurities. The ratio of the wt. of Ni or Mo particles having a particle size of 45 micron or less to the wt. of all particles having that particle size is 2.4-4.2 times greater than the ratio of the wt. of Ni or Mo particles of all sizes to the wt. of all particles. In the compsn. Mo can be replaced by Mo+1/2W (0.65-3.50 wt.%) or W (1.30-7.00 wt.%); if necessary, C (0.3-0.8 wt.%) can be added. The sintered alloy steel contains Ni (0.50-3.50 wt.%), Mo (0.65-3.50 wt.%), Fe and impurities (the rest) with or without C (0.30-0.8 wt.%). It has a density of at least 7.0 g/cm<sup>3</sup> and a tensile strength of at least 130 kgf/mm<sup>2</sup>. In this compsn. Mo can also be replaced by Mo + 1/2W (0.65-3.50 wt.%) or W (1.30-7.00 wt.%).

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**B22F 1/00**; **C22C 38/00**

IPC 8 full level  
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Cited by  
US5567890A; EP1184107A1; WO9413418A1; WO9222395A1; US6610120B2; US6758882B2

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