

Title (en)
PURIFICATION OF METAL PARTICLES BY HEAT PROCESSING

Title (de)
REINIGUNG VON METALLPARTIKELN DURCH HITZEBEHANDLUNG

Title (fr)
PURIFICATION DE PARTICULES MÉTALLIQUES PAR TRAITEMENT THERMIQUE

Publication
EP 1543172 B1 20091216 (EN)

Application
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Abstract (en)
[origin: WO2004029332A2] A method for purifying metal M1 particles manufactured by an electrochemical reduction process, the method comprising the steps of introducing the metal M1 particles into a heat source (13) at a temperature substantially equal to or higher than the melting point of M1 so as to cause vaporisation of some or substantially all of the contaminating impurities present, removing the vaporised Impurities from the vicinity of the particles, and cooling the purified metal M1 particles. The purified particles can be used directly in lower temperature powder metallurgy processes and have fully dense spherical particle morphology, imparting good flowability. The purification process can also be incorporated as an integral stage of sheet or stock production processes based on particle feedstock's that have been produced by electrochemical reduction.

IPC 8 full level
C22B 34/12 (2006.01); **B22F 3/18** (2006.01); **B22F 5/00** (2006.01); **C22B 9/14** (2006.01); **C22B 9/22** (2006.01); **C25C 3/28** (2006.01)

IPC 8 main group level
C25C (2006.01)

CPC (source: EP US)
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