

Title (en)  
METHOD FOR DEGASSING AND SOLIDIFYING ALUMINUM ALLOY POWDER

Publication  
**EP 0568705 A4 19951129 (EN)**

Application  
**EP 92923997 A 19921120**

Priority  
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Abstract (en)  
[origin: WO9309899A1] A method for degassing and solidifying aluminum alloy powder is provided that can eliminate drawbacks inherent in a conventional method by making induction heating available for degassing means during processes of forming and solidifying aluminum powder and aluminum alloy powder. The method comprises the steps of pre-forming aluminum powder, aluminum alloy powder, aluminum composite alloy powder or powder mixtures of these powders and non-ferrous metal particles to a specific resistance of 0.2  $\Omega$ (V) cm or lower, removing heat decomposable evaporation components by directly induction heating the pre-formed body in the normal pressure atmosphere so as to raise the temperature thereof to 400 C to 600 C while maintaining a temperature rise gradient over 300 C at 0.4 C/scm or higher, and reducing the hydrogen content to less than 10 ppm.

IPC 1-7  
**B22F 1/00**; **B22F 3/02**

IPC 8 full level  
**B22F 1/12** (2022.01); **B22F 1/142** (2022.01); **B22F 3/02** (2006.01); **B22F 3/10** (2006.01); **B22F 3/105** (2006.01); **B22F 3/14** (2006.01); **B22F 3/17** (2006.01); **B22F 3/24** (2006.01); **C21D 1/42** (2006.01); **C22C 1/04** (2006.01); **C22C 21/02** (2006.01); **C22F 1/00** (2006.01); **C22F 1/04** (2006.01)

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Citation (search report)  
• [AD] US 4435213 A 19840306 - HILDEMAN GREGORY J [US], et al  
• [A] DATABASE WPI Section Ch Week 8920, Derwent World Patents Index; Class M22, AN 89-148936  
• [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 141 (C - 421) 8 May 1987 (1987-05-08)  
• See references of WO 9309899A1

Cited by  
FR2768436A1; CN110218915A; US6346132B1

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