

Title (en)  
ALLOYING PROCESS

Publication  
**EP 0178502 B1 19890913 (EN)**

Application  
**EP 85112130 A 19850924**

Priority  
• US 65473584 A 19840927  
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Abstract (en)  
[origin: EP0178502A1] A process for adding alloying material to a molten metal. The process includes : converting the alloying material into a spray of superheated alloy material and directing the spray into the molten metal at a predetermined depth below the surface, the depth having been determined beforehand to enhance dissolution and dispersion of the alloying material in the molten metal. An apparatus is also described, consisting of a spark cup to be immersed into the molten metal, means for establishing an electrical arc discharge for spraying the alloying material and means for supplying a shielding gas. The process is suitable for alloying lead, bismuth, antimony, magnesium, zinc or copper into aluminum.

IPC 1-7  
**C22C 1/02**

IPC 8 full level  
**C22C 1/02** (2006.01)

CPC (source: EP)  
**C22C 1/02** (2013.01); **C22C 1/026** (2013.01)

Cited by  
FR2619803A1; CN102353267A; WO0012769A1; WO9525822A1; WO9000205A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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**EP 85112130 A 19850924**; AU 4781385 A 19850924; DE 3573000 T 19850924; NO 853784 A 19850926