

Title (en)  
METHOD OF PRODUCING CORROSION-RESISTANT COATINGS ON FERROUS-BASE ARTICLES

Publication  
**EP 0097487 A3 19840912 (EN)**

Application  
**EP 83303464 A 19830615**

Priority  
US 38930582 A 19820617

Abstract (en)  
[origin: EP0097487A2] Hot-dip aluminum-zinc coatings having an aluminum content in excess of about 25% aluminum exhibit a tendency for corrosion flaking, that is, selective corrosion along the interface between the aluminum-zinc overlay and the underlying intermetallic layer. The tendency to such corrosion flaking increases with the aluminum content of the coating. Methods for minimizing this tendency by accelerated cooling of the molten coating as it emerges from the coating bath are ineffective for coatings containing greater than 72% aluminum. It has been found that the addition of 0.04 to 0.32% magnesium in hot-dip aluminum-zinc coating baths will substantially enhance the resistance of the coating to corrosion flaking.

IPC 1-7  
**C23C 1/08**

IPC 8 full level  
**C23C 2/06** (2006.01); **C23C 2/12** (2006.01)

CPC (source: EP)  
**C23C 2/12** (2013.01)

Citation (search report)

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