

Title (en)
Alloyed hot-dip galvanized steel sheet and production method thereof

Title (de)
Legiertes feuerverzinktes Stahlblech und Herstellungsverfahren dafür

Title (fr)
Tôle d'acier galvanisé à chaud à alliages et son procédé de production

Publication
EP 2145973 A1 20100120 (EN)

Application
EP 09008686 A 20090702

Priority
JP 2008182910 A 20080714

Abstract (en)
Disclosed is an alloyed hot-dip galvanized steel sheet containing 2.0 to 3.5 percent by mass of Mn. The steel sheet includes a base steel sheet and a galvanized zinc-coat layer thereon, in which MnO particles are present in an average number of 10 or less per micrometer on a straight line lying in an interface between the galvanized zinc-coat layer and the steel sheet, an Fe-Al-O alloy layer is present at the interface between the MnO particles and the steel sheet, and the length of the Fe-Al-O alloy layer is less than 10% of the overall length of the interface. The alloyed hot-dip galvanized steel sheet, even though having a high Mn content, is resistant to uneven alloying and excels in surface appearance, because the amounts of the MnO particles and the Fe-Al-O alloy layer that cause uneven alloying are controlled.

IPC 8 full level
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CPC (source: EP KR US)
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