

Title (en)
METALLIC MATERIAL HAVING EXCELLENT METAL DUSTING RESISTANCE

Title (de)
METALLMATERIAL MIT HERVORRAGENDER METAL-DUSTING-BESTÄNDIGKEIT

Title (fr)
MATERIAU METALLIQUE AYANT UNE EXCELLENTE RESISTANCE AU POUSSIERAGE METALLIQUE

Publication
EP 1975267 A4 20120425 (EN)

Application
EP 07706448 A 20070109

Priority
• JP 2007050101 W 20070109
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• JP 2006003481 A 20060111

Abstract (en)
[origin: EP1975267A1] [Objective] To provide a metal material having excellent metal dusting resistance which is suited for using cracking furnaces, reforming furnaces, heating furnaces or heat exchangers, in petroleum refining, petrochemical plants, etc. [Means for Solution] A metal material having excellent metal dusting resistance, characterized in comprising, by mass %, C: 0.01 to 0.4%, Si: 0.01 to 2.5%, Mn: 0.01 to 2.5%, Cr: 15 to 35%, Ni: 20 to 65%, Cu: 0.05 to 20%, S: not more than 0.1%, N: not more than 0.25% and O (oxygen): not more than 0.02% and the balance Fe and impurities, and also containing, by mass %, one or more selected among the elements of P: more than 0.05% and not more than 0.8%, Sb: 0.001 to 1% and Bi: 0.001 to 0.5. It may further contain one or more selected among the elements of Nd: 0.001 to 0.15%, Co: not more than 10%, Mo: not more than 3%, W: not more than 6%, Ti: not more than 1%, Nb: not more than 2%, B: not more than 0.1%, Zr: not more than 1.2%, Hf: not more than 0.5%, Mg: not more than 0.1%, Ca: not more than 0.1%, Al: not more than 0.8%, Y: not more than 0.15%, La: not more than 0.15% and Ce: not more than 0.15%.

IPC 8 full level
C22C 38/00 (2006.01); **C22C 38/60** (2006.01)

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• [X] WO 2005078148 A1 20050825 - SUMITOMO METAL IND [JP], et al & EP 1717330 A1 20061102 - SUMITOMO METAL IND [JP]
• [AD] EP 0903424 A1 19990324 - HALDOR TOPSOE AS [DK]
• [A] JP 2004197150 A 20040715 - SUMITOMO METAL IND
• See references of WO 2007080856A1

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