

Title (en)
Abrasion-resistant steel.

Title (de)
Abriebfester Stahl.

Title (fr)
Acier résistant à l'abrasion.

Publication
EP 0557634 A1 19930901

Application
EP 92302261 A 19920316

Priority
JP 7628692 A 19920227

Abstract (en)
An abrasion-resistant steel consists essentially of 0.05 to 0.45 wt. % C, 0.1 to 1 wt. % Si, 0.1 to 2 wt. % Mn, 0.05 to 1.5 wt.% Ti and the balance being Fe and inevitable impurities, the steel includes at least 200 of precipitates of 1.0 μ m or more in particle size per 1 mm² and the precipitates contains Ti. In addition to the above basic elements, at least one element selected from the group consisting of 0.1 to 2 wt. % Cu, 0.1 to 10 wt. % Ni, 0.1 to 3 wt.% Cr, 0.1 to 3 wt. % Mo and 0.0003 to 0.01 wt.% B may be added to the steel or at least one element selected from the group consisting of 0.005 to 1 wt.% Nb and 0.01 to 1 wt.% V may also or alternatively be added to the steel. <IMAGE>

IPC 1-7
C21D 8/00; **C22C 38/14**

IPC 8 full level
C22C 38/00 (2006.01); **C21D 6/02** (2006.01); **C22C 38/14** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP KR)
C21D 6/02 (2013.01 - EP); **C22C 38/04** (2013.01 - KR); **C22C 38/14** (2013.01 - EP)

Citation (search report)
• [Y] GB 2244718 A 19911211 - NIPPON KOKAN KK [JP]
• [Y] GB 2245282 A 19920102 - NIPPON KOKAN KK [JP]
• [Y] GB 1000868 A 19650811 - YAWATA IRON & STEEL CO
• [Y] CH 377540 A 19640515 - RHEINSTAHL HUETTENWERKE AG [DE]
• [Y] FR 2212434 A1 19740726 - NIPPON STEEL CORP [JP]
• [Y] GB 2122644 A 19840118 - SUMITOMO METAL IND

Cited by
CN102899573A; CN106801200A; EP2657361A4; US8691030B2; US9238849B2

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
EP 0557634 A1 19930901; AU 1215592 A 19930902; AU 6606594 A 19940901; AU 663997 B2 19951026; BR 9201120 A 19930831; CA 2063327 A1 19930828; FI 921390 A0 19920330; FI 921390 A 19930828; JP H05239591 A 19930917; KR 930018046 A 19930921; KR 950005927 B1 19950607; NZ 241930 A 19930526; ZA 921683 B 19921230

DOCDB simple family (application)
EP 92302261 A 19920316; AU 1215592 A 19920310; AU 6606594 A 19940629; BR 9201120 A 19920331; CA 2063327 A 19920318; FI 921390 A 19920330; JP 7628692 A 19920227; KR 920004542 A 19920319; NZ 24193092 A 19920311; ZA 921683 A 19920306