

Title (en)  
AUSTENITIC NICKEL-CHROMIUM STEEL ALLOYS

Title (de)  
AUSTENITISCHE NICKEL-CHROM-STAHLLLEGIERUNG

Title (fr)  
ALLIAGE AUSTENITIQUE D'ACIER AU NICKEL-CHROME

Publication  
**EP 0914485 A1 19990512 (DE)**

Application  
**EP 97937513 A 19970723**

Priority

- DE 19629977 A 19960725
- EP 9703975 W 19970723

Abstract (en)  
[origin: DE19629977A1] A steel alloy contains 0.3 to 1.0 % carbon, 0.2 to 2.5 % silicium, up to 0.8 % manganese, 30.0 to 48.0 % nickel, 16.0 to 22.0 % chromium, 0.5 to 18.0 % cobalt, 1.5 to 4 % molybdenum, 0.2 to 0.6 % niobium, 0.1 to 0.5 % titanium, 0.1 to 0.6 % zirconium, 0.1 to 1.5 % tantalum and 0.1 to 1.5 % hafnium, the remaining percentage being made up of over 20 % iron when the cobalt content equals or exceeds 10 % and of over 30 % iron when the cobalt content is lower than 10 %. The steel alloy is particularly useful as heat-resistant and heating resistant materials for parts, in particular pipes of petrochemical cracking furnaces for producing ethylene or synthesis gas.

IPC 1-7  
**C22C 19/05**; **C22C 38/44**; **C22C 38/48**; **C22C 38/52**; **C22C 38/50**

IPC 8 full level  
**C22C 38/00** (2006.01); **C22C 19/05** (2006.01); **C22C 30/00** (2006.01); **C22C 38/44** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/52** (2006.01)

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**C22C 30/00** (2013.01 - EP US)

Citation (search report)  
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DOCDB simple family (publication)  
**DE 19629977 A1 19980129**; **DE 19629977 C2 20020919**; CA 2261736 A1 19980205; CA 2261736 C 20050614; DE 59707227 D1 20020613; EP 0914485 A1 19990512; EP 0914485 B1 20020508; JP 2000513767 A 20001017; JP 3710097 B2 20051026; US 2001001399 A1 20010524; US 6409847 B2 20020625; WO 9804757 A1 19980205

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