

Title (en)  
AUSTENITIC STAINLESS STEEL

Title (de)  
AUSTENITISCHER EDELSTAHL

Title (fr)  
ACIER INOXYDABLE AUSTÉNITIQUE

Publication  
**EP 3495526 A4 20200108 (EN)**

Application  
**EP 17837044 A 20170802**

Priority  
• JP 2016152690 A 20160803  
• JP 2017028146 W 20170802

Abstract (en)  
[origin: EP3495526A1] An austenitic stainless steel includes base metal and a coating film formed on at least part of a surface of the base metal, a chemical composition of the base metal containing, in mass percent: C: 0.05% or less; Si: 1.0% or less; Mn: 2.0% or less; P: 0.040% or less; S: 0.010% or less; O: 0.020% or less; N: less than 0.050%; Ni: 12.0 to 27.0%; Cr: 15.0% or more to less than 20.0%; Cu: more than 3.5% to 8.0% or less; Mo: more than 2.0% to 5.0% or less; Co: 0.05% or less; Sn: 0.05% or less, V: 0 to 0.5%, Nb: 0 to 1.0%, Ti: 0 to 0.5%, W: 0 to 5.0%, Zr: 0 to 1.0%, Al: 0 to 0.5%, Ca: 0 to 0.01%, B: 0 to 0.01%, REM: 0 to 0.01%, and the balance: Fe and impurities, wherein a chemical composition at a maximum-Cr depth where a concentration of Cr in the coating film reaches a maximum satisfies, in at%,  $[(Cr + Ni + Cu + Mo) / Fe \geq 1.0]$ .

IPC 8 full level  
**C21D 1/76** (2006.01); **C21D 6/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)  
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**C21D 6/007** (2013.01 - EP US); **C21D 6/008** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US);  
**C22C 38/002** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP US); **C22C 38/008** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US);  
**C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP KR US); **C22C 38/44** (2013.01 - EP KR US);  
**C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/52** (2013.01 - EP US);  
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**C21D 6/00** (2013.01 - EP US); **C21D 2211/001** (2013.01 - EP KR US)

Citation (search report)  
• [I] EP 0971045 A1 20000112 - SUMITOMO METAL IND [JP]  
• [A] EP 0155011 A2 19850918 - INCO ALLOYS INT [US]  
• See references of WO 2018025942A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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