

Title (en)
AUSTENITIC STAINLESS STEEL AND METHOD FOR MANUFACTURING SAME

Title (de)
AUSTENITISCHER EDELSTAHL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
ACIER INOXYDABLE AUSTÉNITIQUE ET SON PROCÉDÉ DE FABRICATION

Publication
EP 4361305 A1 20240501 (EN)

Application
EP 22858593 A 20220623

Priority
• KR 20210108635 A 20210818
• KR 2022008906 W 20220623

Abstract (en)
Disclosed is an austenitic stainless steel including, in percent by weight (wt%), 0.005 to 0.03% of C, 0.1 to 1% of Si, 0.1 to 2% of Mn, 0.01 to 0.4 of Cu, 0.01 to 0.2 of Mo, 6 to 9% of Ni, 16 to 19% of Cr, 0.01 to 0.2% of N, and the balance of Fe and inevitable impurities, wherein an austenitic stability parameter (ASP) value calculated by $551-462(C+N)-9.2Si-8.1Mn-13.7Cr-29(Ni+Cu)-18.5Mo$ is from 30 to 60, a $[100*N]/[Ni+Cu]$ value is 1.4 or more, an average grain size is less than 5 μm , and a fraction (%) of grains with a grain size of 5 μm or more is less than 10%.

IPC 8 full level
C22C 38/58 (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/44** (2006.01); **C23G 1/02** (2006.01)

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C22C 38/02 (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/42** (2013.01 - EP); **C22C 38/44** (2013.01 - EP KR);
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