

Title (en)  
Forged Austenitic Stainless Steel Alloy Components and Method Therefor

Title (de)  
Geschmiedete austenitische Edelstahllegierungskomponenten und Verfahren dafür

Title (fr)  
Composants d'alliage en acier non inoxydable austénitique forgé et procédé associé

Publication  
**EP 2058415 A1 20090513 (EN)**

Application  
**EP 08167894 A 20081030**

Priority  
US 93759107 A 20071109

Abstract (en)  
A forgeable austenitic stainless steel alloy and forging process capable of producing forged components (14) that exhibit mechanical and environmental properties and metallurgical stability suitable for use in thermally and chemically hostile environments, such as the environment of a component (14) of a gas turbine engine shroud assembly (10). The alloy contains, by weight, 18.0 to 22.0% chromium, 8.0 to 14.0% nickel, 4.0 to 7.0% manganese, 0.4 to 0.6% silicon, at least 0.2 up to 1.0% nitrogen, at least 0.05 up to 0.075% carbon; up to 0.3% molybdenum, up to 1.0% niobium, up to 0.2% cobalt, up to 4.5% aluminum, up to 0.1 % boron, up to 0.1 % vanadium, up to 1.0% tungsten, and up to 5.0% copper, with the balance iron and incidental impurities.

IPC 8 full level  
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CPC (source: EP KR US)  
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