

Title (en)
MARTENSITE STAINLESS STEEL MATERIAL

Title (de)
MARTENSITISCHES EDELSTAHL MATERIAL

Title (fr)
MATÉRIAU EN ACIER INOXYDABLE MARTENSITIQUE

Publication
EP 4286542 A1 20231206 (EN)

Application
EP 22775695 A 20220323

Priority
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Abstract (en)
A martensitic stainless steel material that achieves both a high yield strength and excellent SSC resistance is provided. The martensitic stainless steel material according to the present disclosure consists of, in mass%, C: 0.030% or less, Si: 1.00% or less, Mn: 1.00% or less, P: 0.030% or less, S: 0.0050% or less, Cu: 0.01 to 3.50%, Cr: 10.00 to 14.00%, Ni: 4.50 to 7.50%, Mo: 1.00 to 4.00%, Ti: 0.050 to 0.300%, V: 0.01 to 1.00%, Al: 0.001 to 0.100%, Co: 0.010 to 0.500%, Ca: 0.0005 to 0.0050%, Sn: 0.0005 to 0.0500%, N: 0.0010 to 0.0500%, O: 0.050% or less, and the balance: Fe and impurities, and has a yield strength of 758 MPa or more. Within this range, the contents of elements and the yield strength satisfy Formula (1) described in the description.

IPC 8 full level
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