

Title (en)
METHOD FOR PRODUCING STEEL MEMBER, AND STEEL MEMBER

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES STAHELEMENTS UND STAHELEMENT

Title (fr)
PROCÉDÉ DE PRODUCTION D'ÉLÉMENT EN ACIER, ET ÉLÉMENT EN ACIER

Publication
EP 3533886 A1 20190904 (EN)

Application
EP 16919933 A 20161031

Priority
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Abstract (en)
A manufacturing method of a steel component includes: heating a steel sheet in a carburizing atmosphere to form a carburized layer on a surface of the steel sheet, the steel sheet having: a chemical composition represented by: in mass%, C: 0.0005 to 0.1%; Si: 0.01 to 2.0%; Mn: 0.05 to 3.0%; Al: 0.9% or less; P: 0.05% or less; S: 0.01% or less; Ti: 0.0 to 0.2%; Nb: 0.0 to 0.1%; Cr: 0 to 2%; Mo: 0.0 to 0.2%; B: 0.000 to 0.005%; and the balance: Fe and impurities; and a steel structure represented by ferrite with an area fraction of 70% or more; and forming the steel sheet by using metal dies, and performing quenching on the steel sheet in a state of housing the steel sheet in the metal dies to transform the carburized layer into martensite and make a part of the steel sheet on the further inside than the carburized layer to be a steel structure represented by ferrite with an area fraction of 50% or more.

IPC 8 full level
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