

Title (en)
HOT STAMP MOLDED BODY

Title (de)
HEISSPRÄGEFORMKÖRPER

Title (fr)
CORPS MOULÉ PAR ESTAMPAGE À CHAUD

Publication
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Application
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Abstract (en)
[origin: EP3456854A1] A hot stamped steel according to one embodiment of the present invention includes a base material and a plated layer, wherein the plated layer includes an interface layer, an intermediate layer, and an oxide layer in order from a base material side to a surface side; in the interface layer, a structure includes 99 area% or more in total of \pm Fe, Fe 3 Al, and FeAl, an average Al content is in a range of 8.0 mass% or more and 32.5 mass% or less, an average Zn content is limited to more than a Zn content of the base material and 5 mass% or less, a remainder of a chemical composition includes Fe and impurities, and an average layer thickness is 1.0 μ m or more; in the intermediate layer, a structure includes 99 area% or more in total of Fe(Al, Zn) 2 and Fe 2 (Al, Zn) 5, an average Al content is 30 mass% to 50 mass%, an average Zn content is 10 mass% to 40 mass%, a remainder of a chemical composition includes Fe and the impurities, and an average layer thickness is 5.0 μ m or more; and in the oxide layer, an average layer thickness is 0.1 μ m to 3.0 μ m.

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Citation (search report)

- [A] EP 2377965 A2 20111019 - POSCO [KR]
- [A] JP 2010248602 A 20101104 - JFE STEEL CORP
- [A] EP 2728032 A2 20140507 - POSCO [KR]
- [A] EP 1630244 A1 20060301 - SUMITOMO METAL IND [JP], et al
- See also references of WO 2017195269A1

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