

Title (en)
HOT STAMPING MATERIAL AND PRODUCTION METHOD THEREFOR

Title (de)
HEISSPRÄGEMATERIAL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
MATÉRIAU D'ESTAMPAGE À CHAUD ET PROCÉDÉ DE FABRICATION ASSOCIÉ

Publication
EP 4209610 A4 20240117 (EN)

Application
EP 21806609 A 20210608

Priority
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Abstract (en)
[origin: EP4209610A1] Provided are a material for hot stamping, wherein the material includes: a steel sheet including carbon (C) in about 0.28 wt% to about 0.50 wt%, silicon (Si) in about 0.15 wt% to about 0.70 wt%, manganese (Mn) in about 0.5 wt% to about 2.0 wt%, phosphorus (P) less than or equal to 0.05 wt%, sulfur (S) less than or equal to 0.01 wt%, chromium (Cr) of about 0.1 wt% to about 0.5 wt%, boron (B) in about 0.001 wt% to about 0.005 wt%, an additive less than or equal to 0.1 wt%, balance iron (Fe), and other inevitable impurities; and fine precipitates distributed within the steel sheet, wherein the additive includes at least one of titanium (Ti), niobium (Nb), and vanadium (V), and the fine precipitates include nitride or carbide of at least one of titanium (Ti), niobium (Nb), and vanadium (V), and trap hydrogen.

IPC 8 full level
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Citation (search report)
• [X] KR 20190001226 A 20190104 - HYUNDAI STEEL CO [KR]
• [X] KR 102021200 B1 20190911
• [A] EP 2631307 A1 20130828 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• [A] WO 2018096387 A1 20180531 - ARCELORMITTAL [LU]
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• [A] WO 2019186930 A1 20191003 - NIPPON STEEL CORP [JP]
• [A] EP 2684972 A1 20140115 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• See also references of WO 2022050536A1

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