

Title (en)
PROCESS FOR PRODUCING STEEL MATERIAL FOR DIE, PROCESS FOR PRODUCING PREHARDENED STEEL PRODUCT FOR DIE, AND
PROCESS FOR PRODUCING COLD WORKING DIE

Title (de)
VERFAHREN ZUR HERSTELLUNG VON STAHLMATERIAL FÜR EINE MATRIZE, VERFAHREN ZUR HERSTELLUNG EINES
VORGEHÄRTETEN STAHLPRODUKTS FÜR EINE MATRIZE UND VERFAHREN ZUR HERSTELLUNG EINER KALTFORMUNGSMATRIZE

Title (fr)
PROCÉDÉ DE PRODUCTION DE MATÉRIAU D'ACIER POUR MATRICE, PROCÉDÉ DE PRODUCTION DE PRODUIT D'ACIER PRÉDURCI
POUR MATRICE, ET PROCÉDÉ DE PRODUCTION DE MATRICE DE FORMAGE À FROID

Publication
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Application
EP 14776113 A 20140303

Priority
• JP 2013074239 A 20130329
• JP 2014055274 W 20140303

Abstract (en)
A steel raw material applied to manufacture of a cold working die with a hardness of 58HRC or more, is cut for use as a prehardened steel material having a size corresponding to a dimension of the cold working die. The steel raw material is a steel raw material for a die having a quenched and tempered structure and hardness of 58 HRC or more. The steel raw material for a die contains 2% by area or less of primary carbides having a circle-equivalent diameter of 5 µm or more in a cross-sectional structure of the steel raw material. Furthermore, manufacturing method of a steel raw material for a die that is preferable to obtain the steel raw material for a die, a subsequent manufacturing method of a prehardened steel material, and a manufacturing method of a cold working die are provided.

IPC 8 full level
B21D 37/20 (2006.01); **B21D 37/01** (2006.01); **C21D 1/18** (2006.01); **C21D 8/00** (2006.01); **C21D 9/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/34** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP)
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Cited by
CN111229950A; US10844456B2

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