

Title (en)  
STEEL SHEET FOR HOT PRESSING USE, PRESS-MOLDED ARTICLE, AND METHOD FOR PRODUCING PRESS-MOLDED ARTICLE

Title (de)  
STAHLBLECH ZUR VERWENDUNG IN EINER HEISSPRESSUNG, PRESSGEFORMTER ARTIKEL UND VERFAHREN ZUR HERSTELLUNG DES PRESSGEFORMTEN ARTIKELS

Title (fr)  
FEUILLE D'ACIER POUR UNE UTILISATION DE PRESSAGE À CHAUD, ARTICLE MOULÉ PAR PRESSAGE ET PROCÉDÉ DE FABRICATION D'UN ARTICLE MOULÉ PAR PRESSAGE

Publication  
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Application  
**EP 13757070 A 20130301**

Priority

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Abstract (en)  
[origin: EP2824204A1] A steel sheet for hot pressing use according to the present invention has a specified chemical component composition, wherein some of Ti-containing precipitates contained in the steel sheet, each of which having an equivalent circle diameter of 30 nm or less, have an average equivalent circle diameter of 6 nm or less, the precipitated Ti amount and the total Ti amount in the steel fulfill the relationship represented by formula (1) shown below, and the sum total of the fraction of bainite and the fraction of martensite in the metal microstructure is 80 area% or more. Precipitated Ti amount mass % - 3.4 N  $\leq$  0.5  $\times$  total Ti amount mass % - 3.4 N (In the formula (1), [N] represents the content (mass%) of N in the steel.)

IPC 8 full level  
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Citation (search report)

- [A] US 2009238715 A1 20090924 - CHO YEOL-RAE [KR], et al
- [A] US 2009098408 A1 20090416 - SUN WEIPING [US]
- [A] EP 1616970 A1 20060118 - JFE STEEL CORP [JP]
- See references of WO 2013133165A1

Cited by  
EP2826879A4; EP3421631A4; EP3521458A4; US10266911B2; US10774405B2

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