

Title (en)  
Alloy sheet for shadow mask and method for manufacturing thereof

Title (de)  
Legierung für Schattenmaske und Verfahren zu dessen Herstellung

Title (fr)  
Alliage pour masque d'ombre et sa méthode de fabrication

Publication  
**EP 0627494 B1 19970723 (EN)**

Application  
**EP 93120232 A 19931215**

Priority  
• JP 15288593 A 19930531  
• JP 18493893 A 19930727

Abstract (en)  
[origin: EP0627494A1] An alloy sheet for making a shadow mask consists essentially of 34 to 38 wt.% Ni, 0.07 wt.% or less Si, 0.002 wt.% or less B, 0.002 wt.% or less O, less than 0.002 wt.% N and the balance being Fe and inevitable impurities; said alloy sheet after annealing before press-forming having 0.2 % proof stress of 28 kgf/mm<sup>2</sup> or less; and a gathering degree of {211} plane being 16 % or less. A method for manufacturing an alloy sheet comprises: a finish cold-rolling step of cold-rolling the cold-rolled sheet at a cold-rolling reduction ratio in response to an average austenite grain size D (  $\mu$  m), the reduction ratio of final cold-rolling R (%) satisfying the equations below;  $16 \leq R \leq 75$ ,  $6.38D - 133.9 \leq R \leq 6.38D - 51.0$  a softening annealing step of annealing said cold rolled sheet in a temperature range of 720 to 790 DEG C for 2 to 40 min. before press-forming and on conditions satisfying the equation below;  $T \geq -53.8 \log t + 806$ , where T( DEG C) is the temperature and t (min.) is the time of the annealing. <IMAGE>

IPC 1-7  
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**EP 93120232 A 19931215**; CN 94103317 A 19940318; DE 69312477 T 19931215; DE 69319153 T 19931215; EP 96101338 A 19931215; KR 19940005990 A 19940324