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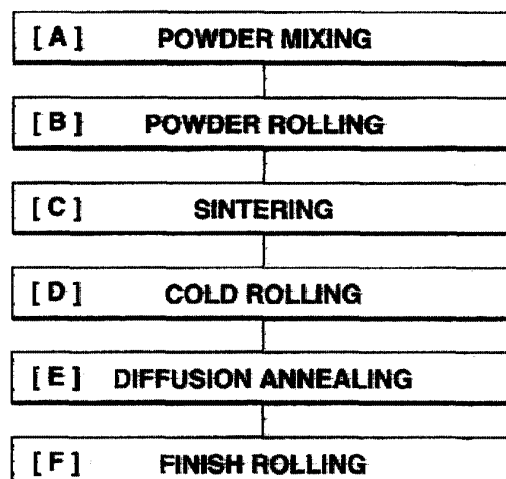
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(54) **Silicon steel plate and method for producing the same**

(57) A silicon steel plate excellent in magnetic properties, workability, flatness, punching quality and the like is produced easily even in a case of high Si content as much as 12 wt%, through [A] powder mixing process using iron powder and Fe-Si alloy powder, [B] powder

rolling process for forming the mixture into sheet metal, [C] sintering process, [D] cold rolling process, [E] diffusion annealing process, and [F] finish rolling process for subjecting the sintered, cold-rolled and annealed sheet metal to skin pass rolling.

FIG.1



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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7) B22F C22C
-The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 5 November 2001	Examiner Swiatek, R
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

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**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-2, 7-12

A silicon steel plate made from metal powder through powder rolling with an insulating film on its surface and a method for producing such a steel.

2. Claims: 3-6, 13-18, 19-22, 23-26

A silicon steel plate made from metal powder through powder rolling and methods for producing it.



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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 5 November 2001	Examiner Swiatek, R
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 10 9188

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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05-11-2001

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