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(71) Applicant: NISSHIN STEEL CO., LTD. 4-1 Marunouchi 3-chome Chiyoda-ku Tokyo 100(JP)

Inventor: Suzaki, Tsunetoshi, c/o Tekkokenkyusho Nisshin Steel Co., Ltd., 11-1, Showa-cho Kure-shi, Hiroshima-ken(JP) Inventor: Iwao, Tomoyoshi, c/o Tekkokenkyusho Nisshin Steel Co., Ltd., 11-1, Showa-cho Kure-shi, Hiroshima-ken(JP)

Inventor: Tanaka, Teruo, Nisshin Steel Co., Ltd.

4-1 Marunouchi 3-chome, Chiyoda-ku

Tokyo(JP)

Inventor: Yamada, Toshiro, c/o

Tekkokenkyusho

Nisshin Steel Co., Ltd., 5, Ishizunishi-machi

Sakai-shi, Osaka(JP)

(4) Representative: BATCHELLOR, KIRK & CO. 2 Pear Tree Court Farringdon Road London EC1R 0DS (GB)

- Method of making steel useful in springs.
- 57 Steel material containing by weight from 0.4 % to 0.8 % carbon, from 0.5 % to 2.5 % silicon, from 0.3 % to 2.0 % manganese, from 0.1 % to 1.5 % chromium, and from 0.1 % to 0.5 % molybdenum is hot-rolled to form a strip or plate. The hot-rolled plate or strip is annealed and cold-rolled at a rolling reduction between 10 % and 80 %. The cold-rolled strip or plate is heated at a temperature above Ac3 critical point for a time sufficient to austenitize carbide and annealed.

Steel springs with attractive properties for use in motor vehicle clutches can be produced from this steel material.



EUROPEAN SEARCH REPORT

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Category	Citation of document with in of relevant page	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)	
X,P	PATENT ABSTRACTS OF vol. 14, no. 559 (C & JP-A-02 240 240 (September 1990 * abstract *	-787)12 December 1990	1	C21D8/02 C21D9/02	
A	FR-A-1 290 235 (CEN L'INDUSTRIE HORLOGE * claim *	TRE TECHNIQUE DE RE, CETEHOR)	1		
A	US-A-4 770 721 (T. * claim 6 *	YAMAMOTO ET AL.)	1		
				TROUBLEAU WHEI DE	
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)	
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	The present search report has b	een drawn up for all claims			
Place of search Date of completion of the search			Economic		
BERLIN		22 JUNE 1993		SUTOR W.	
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		E : earlier patent after the filin ther D : document cit L : document cit	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		