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(54) **Roll for hot forming steel rod.**

(57) Disclosed herein is a carbide roll having an improved composition for hot forming steel rod in multi-stand rolling mills. The improved composition comprises the addition of nickel as a binder material to a normal tungsten carbide-cobalt roll composition, preferably, so that the composition by volume is approximately: tungsten carbide--70 percent; nickel--10 percent; and cobalt--20 percent. A dual composition is disclosed, wherein the above composition forms the inner layer of the roll and an outer layer may be composed of, by volume, tungsten carbide--70 percent and cobalt--30 percent.



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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. 3)
Y	GB-A-2 036 620 (KENNAMETAL INC.) * Whole document *	1-3	B 21 B 27/00 C 22 C 29/00
Y	--- CHEMICAL ABSTRACTS, vol. 84, no. 20, 17th May 1976, page 274, abstract no. 139598d, Columbus, Ohio, US; & JP-A-75 06 509 (SUMITOMO ELECTRIC INDUSTRIES LTD) 23-01-1975	1-3	
Y	--- CHEMICAL ABSTRACTS, vol. 85, no. 18, 1st November 1976, page 364, abstract no. 129175v, Columbus, Ohio, US; & JP-A-76 30 513 (TOKYO SHIBAURA ELECTRIC CO. LTD) 15-03-1976	1-3	
Y	--- US-A-3 993 446 (OKAWA) * Abstract; column 2, lines 27-58 *	1-3	TECHNICAL FIELDS SEARCHED (Int. Cl. 3) B 21 B 27/00 C 22 C 29/00
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 31-03-1987	Examiner ASHLEY G.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 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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A	DE-C- 941 869 (AKTIENGESELLSCHAFT FÜR UNTERNEHMUNGEN DER EISEN- UND STAHLINDUSTRIE) * Whole document * -----	1,2	
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