

Title (en)  
ROLL FOR HOT FORMING STEEL ROD

Publication  
**EP 0120441 B1 19900919 (EN)**

Application  
**EP 84103048 A 19840320**

Priority  
US 47970783 A 19830328

Abstract (en)  
[origin: EP0120441A2] 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.

IPC 1-7  
**B21B 27/00; C22C 29/00**

IPC 8 full level  
**C22C 29/00** (2006.01); **B21B 27/00** (2006.01); **B22F 7/06** (2006.01); **C22C 29/06** (2006.01); **C22C 29/08** (2006.01)

CPC (source: EP KR)  
**B22F 7/06** (2013.01 - EP); **C22C 29/00** (2013.01 - KR); **C22C 29/067** (2013.01 - EP)

Designated contracting state (EPC)  
CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0120441 A2 19841003; EP 0120441 A3 19870701; EP 0120441 B1 19900919**; AR 231806 A1 19850329; AU 2604284 A 19841004; BR 8401476 A 19841113; CA 1229005 A 19871110; DE 120441 T1 19850814; DE 3483214 D1 19901025; JP S59218205 A 19841208; KR 840007902 A 19841211; KR 880000639 B1 19880419; MX 162066 A 19910325; ZA 842059 B 19841031

DOCDB simple family (application)  
**EP 84103048 A 19840320**; AR 29613384 A 19840328; AU 2604284 A 19840323; BR 8401476 A 19840328; CA 450613 A 19840327; DE 3483214 T 19840320; DE 84103048 T 19840320; JP 5592684 A 19840323; KR 840001574 A 19840327; MX 20078984 A 19840327; ZA 842059 A 19840320