

Title (en)  
Rolling mill roll assembly

Title (de)  
Walzwerkswalzenanordnung

Title (fr)  
Agencement de cylindre de laminoir

Publication  
**EP 1378298 A2 20040107 (EN)**

Application  
**EP 03012476 A 20030531**

Priority  
US 18650602 A 20020701

Abstract (en)  
A rolling mill roll assembly comprises a support shaft having a tapered section leading from an abutment to an end section. A ring-shaped roll with inboard and outboard flanks and a cylindrical bore is axially mounted on the shaft with its inboard flank seated against the shaft abutment and with its cylindrical bore surrounding the tapered shaft section. A tapered sleeve is inserted between the tapered section of the shaft and the cylindrical bore of the roll, and a load ring is rotatably fixed with respect to and axially shiftable on the end section of the shaft. A resilient spacer is interposed between the load ring and the sleeve to yieldably maintain a gap between the load ring and the outboard flank of the roll. A roll retainer mounted on the end section of the shaft acts in an abutting relationship with the load ring and via the resilient spacer to close the gap and axially wedge the tapered portion of the sleeve between the tapered section of the shaft and the cylindrical bore of the roll. Bolt members threaded in through bores in the roll retainer are torqued to urge the load ring against the outboard flank of the roll, which in turn urges the outboard flank of the roll against the shaft abutment. <IMAGE>

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**B21B 27/03**

IPC 8 full level  
**B21B 31/08** (2006.01); **B21B 27/02** (2006.01); **B21B 31/02** (2006.01); **B21B 31/18** (2006.01); **B21B 35/00** (2006.01); **B21B 13/00** (2006.01)

CPC (source: EP KR)  
**B21B 27/035** (2013.01 - EP); **B21B 35/00** (2013.01 - KR); **B21B 13/005** (2013.01 - EP)

Cited by  
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