

Title (en)

ROLL RING, COMPRISING CEMENTED CARBIDE AND CAST IRON, AND METHOD FOR MANUFACTURE OF THE SAME

Publication

**EP 0374116 B1 19930721 (EN)**

Application

**EP 89850432 A 19891212**

Priority

SE 8804503 A 19881213

Abstract (en)

[origin: EP0374116A1] The present invention discloses a roll ring for hot and/or cold rolling. The rolling track comprises one or several cemented carbide rings, which are cast into a casing made by an iron alloy. The cast alloy comprising a materially graphitic cast iron, which after the casting contains residual austenite. This residual austenite is at subsequent heat treatment or treatments partly or totally transformed under volume increase to mainly bainite with the aim of reducing or totally eliminating the differential shrinkage between the cast iron and the cemented carbide as a result from cooling after the casting.

IPC 1-7

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IPC 8 full level

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Citation (examination)

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Cited by

CN1050074C; EP0753594A1; US6095958A; CN1068634C; US5897016A; AU657296B2; US10337089B2; EP2508262A1; US6490793B1; US10730104B2; EP2508670A1; WO2012136704A1

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