

Title (en)  
VARIABLE CROWN ROLL

Title (de)  
DURCHBIEGUNGSEINSTELLWALZE

Title (fr)  
ROULEAU A BOMBE VARIABLE

Publication  
**EP 1560981 A1 20050810 (DE)**

Application  
**EP 03772218 A 20031015**

Priority  
• DE 10249796 A 20021024  
• EP 0311390 W 20031015

Abstract (en)  
[origin: WO2004038096A1] The invention relates to a variable crown roll which comprises a rotatable sleeve (2) transversed by a fixed support (1), a hydraulic suspension assembly which is arranged between the support (1) and the tire (2) and consisting of individual hydrostatic bearings (7) axially arranged side by side to each other. Each bearing comprises a radially movable power element (70) and an external bearing element provided with pockets (9). Said external bearing element provided with pockets (9) is embodied in the form of the surface of an external cylindrical bearing which hydrostatically bears the cylindrical sleeve (2) on the internal peripheral line thereof. The inventive roll also comprises a marginal suspension unit (6) which is arranged on each end of the tire. The bearing element provided with pockets (9) is hydrostatically carried by the surface of a spherical internal bearing (13) which concentrically extends with respect to the internal peripheral line of the sleeve (2).

IPC 1-7  
**D21G 1/02**; **F16C 13/00**

IPC 8 full level  
**D21G 1/02** (2006.01); **F16C 13/00** (2006.01)

CPC (source: EP US)  
**D21G 1/022** (2013.01 - EP US); **F16C 13/028** (2013.01 - EP US)

Citation (search report)  
See references of WO 2004038096A1

Designated contracting state (EPC)  
AT DE FI FR GB IT

DOCDB simple family (publication)  
**WO 2004038096 A1 20040506**; AU 2003280377 A1 20040513; DE 10249796 A1 20040513; EP 1560981 A1 20050810; US 2006019808 A1 20060126

DOCDB simple family (application)  
**EP 0311390 W 20031015**; AU 2003280377 A 20031015; DE 10249796 A 20021024; EP 03772218 A 20031015; US 53152805 A 20050609