

Title (en)  
DEVICE FOR THE CONTINUOUS CASTING OF STEEL

Title (de)  
EINRICHTUNG ZUM STRANGGIESSEN VON STAHL

Title (fr)  
INSTALLATION POUR LA COULEE CONTINUE D'ACIER

Publication  
**EP 0732978 B2 20030521 (DE)**

Application  
**EP 95902041 A 19941125**

Priority  
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• DE 4341719 A 19931203

Abstract (en)  
[origin: US5771957A] PCT No. PCT/DE94/01432 Sec. 371 Date Feb. 7, 1996 Sec. 102(e) Date Feb. 7, 1996 PCT Filed Nov. 25, 1994 PCT Pub. No. WO95/15232 PCT Pub. Date Jun. 8, 1995A device for the continuous casting of steel, consisting of a continuous casting mold which oscillates in the casting direction, is mounted on springs clamped at both ends which extend transverse to the direction of casting, and is connected with a hydraulic oscillation drive. The the hydraulic oscillation drives are servo-hydraulic cylinders, arranged in a longitudinal sectional plane placed through the continuous casting mold laterally alongside the continuous casting mold, the servo-hydraulic cylinders are firmly connected, free of play, to a support frame and with the continuous casting mold.

IPC 1-7  
**B22D 11/04**

IPC 8 full level  
**B22D 11/04** (2006.01); **B22D 11/053** (2006.01)

CPC (source: EP US)  
**B22D 11/053** (2013.01 - EP US)

Citation (opposition)  
Opponent :  
• CH 377053 A 19640430 - CONCAST AG [CH]  
• EP 0150357 A1 19850807 - SCHLOEMANN SIEMAG AG [DE]  
• EP 0041196 A2 19811209 - CONCAST HOLDING AG [CH]  
• US 3293707 A 19661227 - ALLAN OLSSON ERIK  
• US 3040397 A 19620626 - HAUSSNER THEODOR H W, et al

Cited by  
AT508395B1; EP1029616A1; US6015006A

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DE ES FR GB IT

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**US 5771957 A 19980630**; AU 1105495 A 19950619; CN 1043615 C 19990616; CN 1139890 A 19970108; DE 4341719 C1 19950406; DE 4341719 C2 20010201; DE 59402855 D1 19970626; EP 0732978 A1 19960925; EP 0732978 B1 19970521; EP 0732978 B2 20030521; ES 2102280 T3 19970716; JP 3373854 B2 20030204; JP H09509365 A 19970922; KR 100301117 B1 20011122; RU 2118582 C1 19980910; WO 9515232 A1 19950608

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**US 56416996 A 19960207**; AU 1105495 A 19941125; CN 94194713 A 19941125; DE 4341719 A 19931203; DE 59402855 T 19941125; DE 9401432 W 19941125; EP 95902041 A 19941125; ES 95902041 T 19941125; JP 51528295 A 19941125; KR 19960702907 A 19960603; RU 96115135 A 19941125