

Title (en)  
INSTALLATION FOR GUIDING A RIGID STARTING BAR

Publication  
**EP 0060484 B2 19881117 (DE)**

Application  
**EP 82101825 A 19820308**

Priority  
CH 168981 A 19810312

Abstract (en)  
[origin: ES8303146A1] A long rigid starting or dummy bar, after passing through a withdrawal and straightening unit, is suspended by means of an automatically operating connection device in a holder arm pivotable about the center of the curved arc or arcuate-shaped path of travel of the secondary cooling zone. The holder arm removes the starting bar out of the withdrawal and straightening unit by virtue of its own pivotal movement which is accomplished by means of a fluid-operated cylinder unit, such as a hydraulic cylinder unit, and places such starting bar in a position where it does not disturb the cast strand region of the installation. The holder or holding arm is mounted and constructed such that it can be placed by means of a crane or other appropriate facility into an almost vertical position, so that the entire space above the withdrawal and straightening unit and the subsequent rolls are freely accessible from above.

IPC 1-7  
**B22D 11/08**; **B22D 11/14**

IPC 8 full level  
**B22D 11/08** (2006.01)

CPC (source: EP US)  
**B22D 11/085** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0060484 A1 19820922**; **EP 0060484 B1 19840919**; **EP 0060484 B2 19881117**; CA 1189677 A 19850702; CH 652627 A5 19851129; DE 3260764 D1 19841025; ES 510889 A0 19830201; ES 8303146 A1 19830201; JP S57159249 A 19821001; US 4478271 A 19841023; ZA 821620 B 19830126

DOCDB simple family (application)  
**EP 82101825 A 19820308**; CA 398118 A 19820311; CH 168981 A 19810312; DE 3260764 T 19820308; ES 510889 A 19820309; JP 3822282 A 19820312; US 35589282 A 19820308; ZA 821620 A 19820311