

Title (en)  
Horizontal metal-extrusion press

Title (de)  
Liegende Metallstrangpresse

Title (fr)  
Presse d'extrusion de métaux horizontale

Publication  
**EP 0589240 B1 19970423 (DE)**

Application  
**EP 93113794 A 19930828**

Priority  
DE 4230620 A 19920912

Abstract (en)  
[origin: EP0589240A1] In order to permit direct measurement of the alignment of the dies, of the moving crosshead and of the container holder in relation to the press axis, at least three distance-measuring sensors (25) directed radially at the press axis (X-X) at centre angles of 120 DEG or less and adjustable concentrically with respect to the press axis to a reference distance are, according to the invention, arranged on the tie bars (4) of a press frame (3) of high dimensional stability, in radial planes (R1, R2...) in which, in the working position and/or selected positions of the container holder (12) and of the dies (10, 23), they sense measurement surfaces (27, 28, 29, 30) provided concentrically on the container or container holder (12) and on the dies (10, 23). In order to be able to carry out the measurements without interruptions to operation, it is advantageous to provide contactless distance-measuring sensors, which are known per se in the form, for example, of sensors based on eddy-current, laser or ultrasound techniques.

IPC 1-7  
**B21C 23/21**

IPC 8 full level  
**B21C 23/21** (2006.01); **B21C 31/00** (2006.01)

CPC (source: EP US)  
**B21C 23/21** (2013.01 - EP US); **B21C 23/215** (2013.01 - EP US)

Cited by  
EP3677356A1; DE19500555C1; CN107962082A; CN109821928A; KR100984500B1; EP3127622A1; ITUB20152800A1; IT201800020782A1; US7216522B2; WO2004000538A3; WO2022078901A1; US11318514B2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0589240 A1 19940330; EP 0589240 B1 19970423**; DE 4230620 C1 19940407; DE 59306246 D1 19970528; JP H06190435 A 19940712; JP H074619 B2 19950125; US 5421181 A 19950606

DOCDB simple family (application)  
**EP 93113794 A 19930828**; DE 4230620 A 19920912; DE 59306246 T 19930828; JP 22577093 A 19930910; US 12018093 A 19930913