

Title (en)

Checking device, especially for forming machines

Title (de)

Überprüfungsvorrichtung, insbesondere für Verformungsmaschinen

Title (fr)

Dispositif de contrôle, notamment pour machines de formage

Publication

EP 0820823 B1 19990929 (DE)

Application

EP 97110898 A 19970702

Priority

DE 29612903 U 19960725

Abstract (en)

[origin: EP0820823A1] The device uses a pair of sensor elements (66,38) displaced together in the direction of the bearing surface (14) for the workpiece (60), for detecting the presence of the latter and the presence of the reception component (56) to which the workpiece is rivetted. The displacement element (104) for the sensor elements has a toothed edge (76) cooperating with an optical detector (78), for detection of the successive halt points as the sensor elements contact the workpiece and the reception component.

IPC 1-7

B21J 15/28; **B21J 15/12**

IPC 8 full level

B21J 15/12 (2006.01); **B21J 15/28** (2006.01)

CPC (source: EP)

B21J 15/12 (2013.01); **B21J 15/285** (2013.01)

Cited by

DE202013000092U1; CN102152171A; CN102248448A; DE202012012292U1; JP2019508255A; US10994324B2; WO2005007319A1; WO9948633A1; WO2015110302A1

Designated contracting state (EPC)

AT DE ES FR GB IT

DOCDB simple family (publication)

EP 0820823 A1 19980128; **EP 0820823 B1 19990929**; AT E185095 T1 19991015; DE 59700494 D1 19991104; ES 2138418 T3 20000101

DOCDB simple family (application)

EP 97110898 A 19970702; AT 97110898 T 19970702; DE 59700494 T 19970702; ES 97110898 T 19970702