

Title (en)
Treating machine, in particular automatic punching and bending machine.

Title (de)
Bearbeitungsmaschine, insbesondere Stanz- und Biegeautomat.

Title (fr)
Machine de traitement, notamment machine automatique à poinçonner ou à plier.

Publication
EP 0445740 B1 19940914 (DE)

Application
EP 91103327 A 19910305

Priority
DE 4007204 A 19900307

Abstract (en)
[origin: EP0445740A1] In our metal working machine, e.g. an automatic punching and bending machine, it is proposed to drive a plurality of metal working units 14 by means of a reciprocating driving rod 18, control cams being attached to the driving rod and cam followers being attached to the moving parts 14c of the metal working units. <IMAGE>

IPC 1-7
B21F 1/00

IPC 8 full level
B21F 1/00 (2006.01); **B23P 23/04** (2006.01); **B30B 1/26** (2006.01)

CPC (source: EP US)
B21F 1/00 (2013.01 - EP US); **B21F 99/00** (2013.01 - EP US); **Y10T 83/8828** (2015.04 - EP US)

Cited by
IT202000029363A1; WO2011039730A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0445740 A1 19910911; **EP 0445740 B1 19940914**; DE 4007204 A1 19910912; DE 59102886 D1 19941020; JP 2501963 B2 19960529; JP H04224096 A 19920813; US 5186037 A 19930216

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EP 91103327 A 19910305; DE 4007204 A 19900307; DE 59102886 T 19910305; JP 4001691 A 19910306; US 66492491 A 19910305