

Title (en)  
Upper tool for press brake.

Title (de)  
Oberes Werkzeug für Biegepresse.

Title (fr)  
Outil supérieur pour presse plieuse.

Publication  
**EP 0630700 A1 19941228 (EN)**

Application  
**EP 94107730 A 19940518**

Priority  
JP 11566593 A 19930518

Abstract (en)  
An upper tool for a press brake includes a push actuating section (9K, 107, 9U) for actuating upward an actuated member (17, 103P, 121) movable up and down, in a clamping force increasing mechanism such that an upper tool clamping force can be increased gradually when the actuated member (17, 103P, 121) mounted on an upper holder device (1) of the press brake is moved upward. An example of the push actuating section is a lower surface of an engage groove portion (9K) extending horizontally and formed in any of front and rear surfaces of the upper tool (9). Further, the engage groove portion (9K) is formed between a vertical position roughly the same as a holder contact surface (9F) formed at a shoulder portion of the upper tool (9) and another vertical position slightly lower than an upper end of the upper tool. <IMAGE>

IPC 1-7  
**B21D 5/02**

IPC 8 full level  
**B21D 5/02** (2006.01)

CPC (source: EP)  
**B21D 5/0209** (2013.01); **B21D 5/0236** (2013.01)

Citation (search report)  
• [X] DE 3932629 A1 19900405 - WILA MASCHF BV [NL]  
• [XPAP] EP 0569880 A2 19931118 - AMADA METRECS CO [JP]  
• [AD] EP 0387121 A1 19900912 - AMADA SA [FR]

Cited by  
US5782308A

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DE FR GB IT

DOCDB simple family (publication)  
**EP 0630700 A1 19941228**; **EP 0630700 B1 19990804**; CA 2123844 A1 19941119; DE 69419838 D1 19990909; DE 69419838 T2 19991125; JP 3004597 U 19941122

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**EP 94107730 A 19940518**; CA 2123844 A 19940518; DE 69419838 T 19940518; JP 533694 U 19940517