

Title (en)
Improved punching machine for metal sheet panels

Title (de)
Verbesserte Stanzvorrichtung für Blechteile

Title (fr)
Poinçonneuse de tôles améliorée

Publication
EP 0920933 A3 20010103 (EN)

Application
EP 98203435 A 19981012

Priority
IT MI972695 A 19971205

Abstract (en)
[origin: EP0920933A2] Punching machine for metal sheet panels comprising a work table (1), a bearing structure (2; 2 @ , 2 @) for punching means (4 @ , 4 @) having a groove (3) where said work table passes through, and moving means (13, 14; 13, 60) for a panel on said work table to bring the panel in correspondence of said punching means, characterised in that said punching means comprise two punching units (4 @ , 4 @) that are mounted to said bearing structure (2; 2 @ , 2 @) and are substantially facing one another. <IMAGE>

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IPC 8 full level
B26D 7/01 (2006.01); **B21D 28/24** (2006.01); **B21D 28/26** (2006.01); **B21D 28/34** (2006.01); **B21D 43/10** (2006.01); **B26F 1/00** (2006.01)

CPC (source: EP)
B21D 28/246 (2013.01); **B21D 28/265** (2013.01); **B21D 43/10** (2013.01)

Citation (search report)
• [XY] US 4503741 A 19850312 - HUNTER JAMES R [US], et al
• [Y] EP 0100420 A1 19840215 - INVENTIO AG [CH]
• [A] US 4092892 A 19780606 - MOONE RONALD
• [X] PATENT ABSTRACTS OF JAPAN vol. 009, no. 098 (M - 375) 27 April 1985 (1985-04-27)
• [X] PATENT ABSTRACTS OF JAPAN vol. 009, no. 198 (M - 404) 15 August 1985 (1985-08-15)

Cited by
CN114378171A; FR2872440A1; EP1759782A1; EP1447156A1; US7090898B2; WO2006013260A1; WO2007026079A1; WO03015953A1

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