

Title (en)  
STRAPPING DEVICE

Publication  
**EP 0372212 B1 19931013 (DE)**

Application  
**EP 89119901 A 19891026**

Priority  
DE 3841489 A 19881209

Abstract (en)  
[origin: EP0372212A1] Strapping device with a tensioning device (14), which has a tensioning wheel (16), for the tensioning of a steel strap (13) which can be drawn off a feed roll and is placed around a filled package, with a closing device, which has a stationary lower punching tool (20) and an upper punching tool (21) which performs the punching movement, for connecting the overlapping ends of the steel strap (13) by means of at least two pairs of angular cuts, which lie one behind the other in the longitudinal direction of the strap, the upper punching tool (21), which performs the punching movement, being mounted and drivable in such a manner that, during its planned punching movement, the cutting of one pair of cuts begins earlier than that of the other pair of cuts, and the upper punching tool (21), during the cutting of the pairs of cuts, performing, with its working surface (22) which faces towards the lower punching tool (20), an essentially rolling movement in relation to the working surface (29) of the lower punching tool, which movement is combined with an infeed movement of the upper punching tool in relation to the lower punching tool, so that the cutting movement ends earlier on the pair of cuts begun first than on the pair of cuts begun subsequently. <IMAGE>

IPC 1-7  
**B65B 13/30**

IPC 8 full level  
**B65B 13/30** (2006.01)

CPC (source: EP US)  
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Cited by  
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**EP 0372212 A1 19900613; EP 0372212 B1 19931013**; AT E95773 T1 19931015; DE 3841489 A1 19900613; DE 3841489 C2 19920305; DE 58905904 D1 19931118; ES 2015504 A4 19900901; ES 2015504 T3 19940116; RU 1776242 C 19921115; UA 18247 A 19971225; US 5029433 A 19910709

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