

Title (en)  
MECHANICAL DEVICE, TO BE INSTALLED ON SEWING MACHINES, WHICH DOES NOT ALTER THE ORIENTATION OF A PAIR OF NEEDLES POSITIONED SIDE BY SIDE, BUT REPEATEDLY INVERTS THEIR POSITION

Publication  
**EP 0317528 B1 19920212 (EN)**

Application  
**EP 88830496 A 19881121**

Priority  
IT 6458787 A 19871119

Abstract (en)  
[origin: EP0317528A1] This invention concerns a mechanical device for installation on automatic sewing machines, for repeatedly inverting the position, while leaving the direction unchanged, of a pair of needles fitted side by side, co-operating with a single "crochet" and capable of carrying out special, particularly decorative, sewing stitches, which are often used in the footwear sector and more generally in the leather industry.

IPC 1-7  
**D05B 3/02**

IPC 8 full level  
**D05B 3/02** (2006.01); **D05B 55/02** (2006.01); **D05B 15/00** (2006.01)

CPC (source: EP)  
**D05B 3/02** (2013.01); **D05B 55/02** (2013.01); **D05B 15/00** (2013.01)

Cited by  
CN1059247C; WO9727353A1

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR LI LU NL SE

DOCDB simple family (publication)  
**EP 0317528 A1 19890524**; **EP 0317528 B1 19920212**; AT E72588 T1 19920215; DE 3868384 D1 19920326; ES 2030532 T3 19921101;  
IT 1213617 B 19891229; IT 8700645 A0 19871119

DOCDB simple family (application)  
**EP 88830496 A 19881121**; AT 88830496 T 19881121; DE 3868384 T 19881121; ES 88830496 T 19881121; IT 6458787 A 19871119