

Title (en)
Buttonhole darning sewing machine

Title (de)
Knopflochnähmaschine

Title (fr)
Machine à coudre les boutonnières

Publication
EP 0887452 A3 19990811 (EN)

Application
EP 98111679 A 19980625

Priority
JP 17264997 A 19970627

Abstract (en)
[origin: EP0887452A2] There is provided needle drop control means which, when a sewing machine stop signal is generated, sets a needle 9 stop position on the more right side than a cloth cutting knife 16 with respect to an operator. The needle drop control means, when the formation of buttonhole darning stitches is completed, sets the needle 9 stop position on the more right side than a cloth cutting knife 16 with respect to the operator. The needle drop control means includes electrical drive means for moving a needle 9 to a given position existing in the right and left direction, and a control circuit for giving a drive instruction to the electrical drive means to stop the needle 9 at the given position, that is, the given needle stop position. <IMAGE>

IPC 1-7
D05B 3/06; D05B 69/22

IPC 8 full level
D05B 3/02 (2006.01); **D05B 3/06** (2006.01); **D05B 19/14** (2006.01); **D05B 37/02** (2006.01); **D05B 69/22** (2006.01); **D05B 69/24** (2006.01)

CPC (source: EP)
D05B 3/06 (2013.01); **D05B 19/14** (2013.01); **D05B 69/22** (2013.01); **D05B 69/24** (2013.01)

Citation (search report)
• [A] US 5086719 A 19920211 - OGAWA MASAO [JP]
• [A] US 4185574 A 19800129 - SEDLATSCHER ROBERT [US], et al
• [A] US 5222449 A 19930629 - KOIE KAZUAKI [JP], et al
• [A] US 2273242 A 19420217 - WOOD ALFRED R
• [A] US 1473240 A 19231106 - MICHAEL MCCANN
• [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 361 (C - 0867) 12 September 1991 (1991-09-12)

Cited by
CN100395393C; DE19951127A1; DE19951127C2; DE10165087B3

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0887452 A2 19981230; EP 0887452 A3 19990811; EP 0887452 B1 20021002; CN 1140660 C 20040303; CN 1207425 A 19990210;
DE 69808381 D1 20021107; DE 69808381 T2 20030703; JP 4026886 B2 20071226; JP H119861 A 19990119; TW 402649 B 20000821

DOCDB simple family (application)
EP 98111679 A 19980625; CN 98117416 A 19980627; DE 69808381 T 19980625; JP 17264997 A 19970627; TW 87110364 A 19980626