

Title (en)
BUTTON HOLE SEWING DEVICE

Publication
EP 0170615 A3 19860219 (DE)

Application
EP 85810258 A 19850604

Priority
CH 310584 A 19840627

Abstract (en)
[origin: US4622910A] The button hole presser foot engages longitudinally slidably in a frame like slide which is taken along with the sewing material. The slide comprises a cord stretched in the longitudinal direction which encircles the lower end of a shaft of the presser foot shank. At the top end of the shaft is provided an impeller through which a light beam of a light source emerges toward a optoelectric transducer. During the sewing operation the slide moves with the sewing material and it drives the impeller which generates pulses each corresponding to a step of the motion of the sewing material, respectively of the slide. For determining the length of the cords, a determined number of steps, respectively of pulses is counted each time. This permits a reliable and precise determination of the length of the cords.

IPC 1-7
D05B 3/24; G01D 5/36

IPC 8 full level
D05B 3/06 (2006.01); **D05B 3/24** (2006.01)

CPC (source: EP US)
D05B 3/24 (2013.01 - EP US)

Citation (search report)

- [AD] US 4242976 A 19810106 - BECKERMAN HOWARD L, et al
- [AD] US 4216732 A 19800812 - BECKERMAN HOWARD L [US], et al
- [A] DE 2720919 A1 19781116 - KOCH GERHARD
- [A] US 3954071 A 19760504 - MALL GUNTHER, et al
- [A] DE 3224314 A1 19830407 - SINGER CO [US]
- [A] DE 2917950 A1 19801113 - PFAFF IND MASCH
- [A] US 4409913 A 19831018 - ADAMS KENNETH D [US], et al
- [A] DE 3027320 A1 19810205 - JANOME SEWING MACHINE CO LTD

Cited by
EP0373105A1

Designated contracting state (EPC)
CH DE FR GB LI SE

DOCDB simple family (publication)
EP 0170615 A2 19860205; EP 0170615 A3 19860219; EP 0170615 B1 19880330; AU 4370185 A 19860102; AU 575956 B2 19880811;
DE 3562026 D1 19880505; JP H0761389 B2 19950705; JP S6113993 A 19860122; US 4622910 A 19861118

DOCDB simple family (application)
EP 85810258 A 19850604; AU 4370185 A 19850614; DE 3562026 T 19850604; JP 13809685 A 19850626; US 74589285 A 19850618