Title (en)

Fastener stock and device for attaching same.

Title (de

Gruppe von Befestigungselementen und Vorrichtung zu deren Anbringung.

Title (fr)

Ensemble d'attaches et dispositif pour leur utilisation.

Publication

EP 0474938 B1 19951018 (EN)

Application

EP 90312279 A 19901109

Priority

- US 57585390 A 19900831
- US 57585590 A 19900831

Abstract (en)

[origin: EP0474938A1] The assembly includes first and second parallel connecting bars (32) between which individual attachments (36) are situated in parallel, spaced relation. Each of the attachments includes first and second T-bar ends (38,40) with a flexible filament (39) extending therebetween. The attaching device includes a housing (10,12) with a recess (24) having a first and second sections (26,28) adapted to receive the first and second connecting bars, respectively. First and second hollow needles (20,22) extend from the housing. The T-bar ends are pushed through needles by simultaneously actuatable ejector rods (66,68) after each is severed from the associated connecting bar. The assembly of the attachments is advanced through the housing to align the T-bars with the needles by simultaneously actuated indexing gears. The gears (78) cooperate with the elements which join the T-bar ends and the connecting bars. <IMAGE>

IPC 1-7

B65C 7/00

IPC 8 full level

**B65C 7/00** (2006.01)

CPC (source: EP KR)

B65C 7/00 (2013.01 - KR); B65C 7/005 (2013.01 - EP)

Cited by

EP0616946A1; CN109969513A; CN102046475A; US11161642B2; US11465795B2

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

**EP 0474938 A1 19920318**; **EP 0474938 B1 19951018**; CA 2027494 A1 19920301; CA 2027494 C 19950627; DE 69023136 D1 19951123; DE 69023136 T2 19960620; JP H0692334 A 19940405; KR 920004126 A 19920327; KR 950000370 B1 19950116

DOCDB simple family (application)

EP 90312279 A 19901109; CA 2027494 A 19901012; DE 69023136 T 19901109; JP 19197691 A 19910731; KR 900020224 A 19901210