

Title (en)

PLASTIC FASTENER, FASTENER CLIP, FASTENER DISPENSING TOOL AND METHOD OF FASTENING OBJECTS

Title (de)

BEFESTIGUNGSELEMENT AUS KUNSTSTOFF, KLAMMER, VORRICHTUNG ZUR BEREITSTELLUNG DERBEFESTIGUNGSELEMENTE UND VERFAHREN ZUM BEFESTIGEN VON GEGENSTÄNDEN.

Title (fr)

AGRAFE EN MATIERE PLASTIQUE, PINCE D'AGRAFAGE, OUTIL DISTRIBUTEUR D'AGRAFES ET PROCEDE D'AGRAFAGE D'OBJETS

Publication

EP 1204337 A4 20020828 (EN)

Application

EP 00916055 A 20000302

Priority

- US 0005649 W 20000302
- US 12255799 P 19990302
- US 48318100 A 20000113
- US 48318000 A 20000113

Abstract (en)

[origin: WO0051792A2] According to one embodiment, the plastic fastener comprises a flexible filament having a length of about 4.3 mm and a tensile strength of about 2 pounds, a first transverse bar located at one end of the flexible filament, and a second transverse bar located at the opposite end of the flexible filament. The fastener clip, which preferably does not contain a runner bar, comprises a plurality of identical fasteners of the aforementioned type, each of the fasteners being arranged in a parallel, side-by-side, spaced relationship. A connector post connects the first transverse bars of adjacent fasteners, and a connector post connects the second transverse bars of adjacent fasteners. An extra transverse bar is connected by a connector post to the first transverse bar of the last fastener, and another extra transverse bar is connected by a connector post to the second transverse bar of the last fastener, the extra transverse bars not being interconnected by a flexible filament.

[origin: WO0051792A2] Plastic fastener (11), fastener clip (31), fastener dispensing tool (51), and method of fastening objects; comprises a flexible filament (13), a first transverse bar (15) located at one end of the flexible element (13), a second transverse bar (17) located at the opposite end of the flexible element (13). The fastener clip (31); comprises a plurality of identical fasteners (11-1) (11-3), of the aforementioned type, each of the fasteners being arranged in a parallel, side-by-side, spaced relationship. A connector post (33) connects the first transverse bar (15) of adjacent fasteners (11), and a connector post connects the second transverse bars (17) of adjacent fastener (11). An extra transverse bar (37) is connected by a connector post to the first transverse bar (15), and another extra transverse bar (39) is connected by a connector post to the second transverse bar (17) of the fastener. The tool is a handheld tool for use with the above fastener (11), comprises a casing (53) provided with a needle opening (62), a hollow, slotted needle (93) adapted to receive a transverse bar of the fastener (11); an ejector rod (143) slidably movable back and forth through the hollow, slotted needle (93), an anvil (73) coupled to the casing (53) and extending in front of the opening (62) being positioned so that the hollow, slotted needle (93), when in the extended position, does not extend therebeyond.

IPC 1-7

A44B 21/00; **A41H 37/10**; **B25C 5/11**; **B65C 7/00**; **B65D 85/24**; **G09F 3/08**; **G09F 3/14**; **B29C 45/26**

IPC 8 full level

A44B 99/00 (2010.01); **B65C 7/00** (2006.01); **G09F 3/14** (2006.01)

CPC (source: EP)

B65C 7/005 (2013.01); **G09F 3/14** (2013.01)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 0051792A2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 0051792 A2 20000908; **WO 0051792 A3 20010308**; **WO 0051792 A9 20020502**; AU 3721900 A 20000921; CA 2365028 A1 20000908; CA 2365028 C 20050201; DE 60032613 D1 20070208; DE 60032613 T2 20071115; EP 1204337 A2 20020515; EP 1204337 A4 20020828; EP 1204337 B1 20061227

DOCDB simple family (application)

US 0005649 W 20000302; AU 3721900 A 20000302; CA 2365028 A 20000302; DE 60032613 T 20000302; EP 00916055 A 20000302