

Title (en)
Module for dispensing plastic fasteners

Title (de)
Abgabemodul für Kunststoffbefestigungselemente

Title (fr)
Module de distribution d'attaches en plastique

Publication
EP 2241509 A1 20101020 (EN)

Application
EP 10169457 A 20020529

Priority
• EP 02739497 A 20020529
• US 86726401 A 20010529
• US 11645102 A 20020404

Abstract (en)
The object of the invention is a module 29 for dispensing a plastic fastener from a reel of fastener stock to couple together two or more objects, said module 29 comprising (a) a hollowed needle 75 having a sharpened tip, (b) a needle holder 71 for holding said hollowed needle 75, (c) a retractable needle guard assembly 131 mounted onto said needle holder 71 over said hollowed needle 75, (d) a feed mechanism 103 for advancing the fastener stock 11 into said hollowed needle 75, (e) a severing mechanism 121 for severing the fastener 18 to be dispensed through said hollowed needle 75 from the fastener stock 11, and (f) an ejection mechanism 84 for ejecting the severed fastener through said hollowed needle 75.

IPC 8 full level
B65C 7/00 (2006.01); **B25H 1/00** (2006.01)

CPC (source: EP)
B65C 7/005 (2013.01)

Citation (applicant)
• US 4039078 A 19770802 - BONE ARNOLD R
• US 5615816 A 19970401 - DESCHENES CHARLES L [US], et al
• US 5616816 A 19970401 - BURJES LOUIS [US], et al

Citation (search report)
• [X] US 4402446 A 19830906 - SUZUKI TADASHI [JP]
• [X] US 5471727 A 19951205 - KUBOTA MIKIO [JP]
• [X] EP 0825120 A1 19980225 - KOTECOS CO LTD [JP], et al
• [XP] WO 0232767 A1 20020425 - MORPLAN LTD [GB], et al
• [A] US 4179063 A 19791218 - RUSSELL DAVID B [US]

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

DOCDB simple family (publication)
WO 02096757 A1 20021205; AT E549256 T1 20120315; CN 1299952 C 20070214; CN 1535230 A 20041006; DE 60237446 D1 20101007; EP 1401715 A1 20040331; EP 1401715 A4 20050727; EP 1401715 B1 20100825; EP 2241509 A1 20101020; EP 2241509 B1 20120314; ES 2382772 T3 20120613

DOCDB simple family (application)
US 0216926 W 20020529; AT 10169457 T 20020529; CN 02814812 A 20020529; DE 60237446 T 20020529; EP 02739497 A 20020529; EP 10169457 A 20020529; ES 10169457 T 20020529