

Publication

EP 0725176 A3 19960821

Application

EP 95119357 A 19951208

Priority

DE 19503048 A 19950201

Abstract (en)

[origin: DE19503048C1] Shaft (2) attached to a butt end (1) ends in a point (3) and has at least one groove in it, leading to an eye (4). Near the butt end, the shaft has a circumferential neck (6) which acts as a predetermined breaking point. A tapered section (7) abuts this point with a transition to a cylindrical section (8).

IPC 1-7

D05C 11/02; D05B 85/00

IPC 8 full level

B21G 1/04 (2006.01); **D05B 85/00** (2006.01); **D05C 11/02** (2006.01)

CPC (source: EP US)

B21G 1/04 (2013.01 - EP US); **D05B 85/00** (2013.01 - EP US); **D05C 11/02** (2013.01 - EP US)

Citation (search report)

- [X] US 3624675 A 19711130 - FOSTER EDSON P
- [X] GB 1239556 A 19710721
- [DA] DE 4320956 A1 19950112 - GARTZEN JOHANNES PROF DR RER N [DE], et al
- [A] FR 2127737 A5 19721013 - TORRINGTON CO

Designated contracting state (EPC)

CH DE ES GB IT LI

DOCDB simple family (publication)

DE 19503048 C1 19960314; **DE 19503048 C2 19990923**; CA 2168502 A1 19960802; CA 2168502 C 20010227; DE 59506030 D1 19990701; EP 0725176 A2 19960807; EP 0725176 A3 19960821; EP 0725176 B1 19990526; ES 2131748 T3 19990801; JP 3088651 B2 20000918; JP H08232162 A 19960910; US 5666896 A 19970916

DOCDB simple family (application)

DE 19503048 A 19950201; CA 2168502 A 19960131; DE 59506030 T 19951208; EP 95119357 A 19951208; ES 95119357 T 19951208; JP 1282896 A 19960129; US 59263096 A 19960126