

Title (en)  
PUSHING STICK AND RING FOR SAME

Title (de)  
ABSTOSSSTOCK UND RING DAFÜR

Title (fr)  
BATON DE POUSSEE ET SON ANNEAU

Publication  
**EP 1349619 B1 20060621 (EN)**

Application  
**EP 01271248 A 20011217**

Priority  
• FI 0101107 W 20011217  
• FI 20002766 A 20001218  
• FI 20011486 A 20010706

Abstract (en)  
[origin: WO0249729A1] The invention relates to a pushing stick and a ring for the same. The stick (1) comprises a shaft (2) and a handle part (3) at the upper end of the shaft (2) in order to direct a push force (F) to the stick. The lower end of the shaft (2) comprises a stick ring (5) comprising a fastening part (6) and a projection-like ring frame (7) attached to the fastening part (6). The bar-like ring frame (7) is directed forwards with respect to the direction of travel (A) and its front (9) is provided with at least one spike (11). Said spike (11) then resides at a distance (C) from the central axis of the shaft (2), whereby a bending moment is directed to the ring frame (7) on account of the push force (F). The ring frame (7) is rigid in order to be able to transmit the bending moment being formed to the lower end of the shaft (2).

IPC 8 full level  
**A63C 11/24** (2006.01); **A63C 11/22** (2006.01)

CPC (source: EP US)  
**A63C 11/22** (2013.01 - EP US); **A63C 11/24** (2013.01 - EP 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 0249729 A1 20020627**; AT E330679 T1 20060715; AU 1925302 A 20020701; CA 2431817 A1 20020627; DE 60121040 D1 20060803; DE 60121040 T2 20061130; EP 1349619 A1 20031008; EP 1349619 B1 20060621; FI 110166 B 20021213; FI 20011486 A0 20010706; FI 20011486 A 20020619; JP 2004516080 A 20040603; NO 20032544 D0 20030605; NO 20032544 L 20030814; US 2004007865 A1 20040115

DOCDB simple family (application)  
**FI 0101107 W 20011217**; AT 01271248 T 20011217; AU 1925302 A 20011217; CA 2431817 A 20011217; DE 60121040 T 20011217; EP 01271248 A 20011217; FI 20011486 A 20010706; JP 2002551062 A 20011217; NO 20032544 A 20030605; US 45263503 A 20030603