

Title (en)  
SWITCH TONGUES

Title (de)  
WEICHENZUNGEN

Title (fr)  
LAMES D'AIGUILLE

Publication  
**EP 0904457 A1 19990331 (DE)**

Application  
**EP 97927161 A 19970610**

Priority  
• DE 19623269 A 19960611  
• EP 9703000 W 19970610

Abstract (en)  
[origin: DE19623269A1] The invention concerns a switching device for tongues whose tips lie on the slide-chair roller plane. The switch tongues can be switched more easily if the front roller (7a) of the pair of rollers (6) is positioned at a lower level than the rear roller (7b).

IPC 1-7  
**E01B 7/02**

IPC 8 full level  
**E01B 7/02** (2006.01)

CPC (source: EP US)  
**E01B 7/02** (2013.01 - EP US); **E01B 2202/046** (2013.01 - EP US)

Cited by  
WO2005017258A1; EP2995718A1; DE10229566A1; DE102004040176C5; DE102014218125B3

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

DOCDB simple family (publication)  
**US 6464177 B1 20021015**; AR 007783 A1 19991124; AT E216745 T1 20020515; AU 3174597 A 19980107; AU 716444 B2 20000224; BR 9709776 A 20000111; CA 2257927 A1 19971218; CA 2257927 C 20070102; CN 1222212 A 19990707; CZ 293602 B6 20040616; CZ 405298 A3 20000112; DE 19623269 A1 19971218; DE 59707109 D1 20020529; DK 0904457 T3 20020812; EP 0904457 A1 19990331; EP 0904457 B1 20020424; ES 2176747 T3 20021201; JP 2000511979 A 20000912; JP 3587531 B2 20041110; PT 904457 E 20020930; RU 2265687 C2 20051210; WO 9747811 A1 19971218; ZA 975055 B 19980116

DOCDB simple family (application)  
**US 20223100 A 20000717**; AR P970102538 A 19970611; AT 97927161 T 19970610; AU 3174597 A 19970610; BR 9709776 A 19970610; CA 2257927 A 19970610; CN 97195469 A 19970610; CZ 405298 A 19970610; DE 19623269 A 19960611; DE 59707109 T 19970610; DK 97927161 T 19970610; EP 9703000 W 19970610; EP 97927161 A 19970610; ES 97927161 T 19970610; JP 50118798 A 19970610; PT 97927161 T 19970610; RU 99100386 A 19970610; ZA 975055 A 19970609