

Title (en)
SCISSORS

Title (de)
SCHERE

Title (fr)
CISEAUX

Publication
EP 0930959 A1 19990728 (DE)

Application
EP 98943769 A 19980722

Priority
• DE 19734605 A 19970809
• EP 9804609 W 19980722

Abstract (en)
[origin: US2002083594A1] To improve the cutting properties of a pair of scissors 1, such as hairdressing shears 11, it is proposed that at least one shank 4 be made to vibrate parallel to the longitudinal direction (6) of the blade (7) of this shank (4) by means of an electrically powered vibrator (5). The vibrator (5) may include a piezoelectric travel transducer (8), which deflects the blade (7) with an ultrasonic frequency.

IPC 1-7
B26B 15/00; **B26B 13/24**

IPC 8 full level
B26B 13/00 (2006.01); **B26B 13/24** (2006.01); **B26B 15/00** (2006.01)

CPC (source: EP US)
B26B 13/24 (2013.01 - EP US); **B26B 15/00** (2013.01 - EP US)

Citation (search report)
See references of WO 9907528A1

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

DOCDB simple family (publication)
US 2002083594 A1 20020704; AT E198062 T1 20001215; AU 9155898 A 19990301; BR 9806089 A 19990824; CN 1229378 A 19990922; DE 19734605 A1 19990211; DE 59800385 D1 20010118; EP 0930959 A1 19990728; EP 0930959 B1 20001213; ES 2154940 T3 20010416; JP 2001501859 A 20010213; RU 2167049 C2 20010520; US 6357121 B1 20020319; WO 9907528 A1 19990218

DOCDB simple family (application)
US 94795801 A 20010906; AT 98943769 T 19980722; AU 9155898 A 19980722; BR 9806089 A 19980722; CN 98800796 A 19980722; DE 19734605 A 19970809; DE 59800385 T 19980722; EP 9804609 W 19980722; EP 98943769 A 19980722; ES 98943769 T 19980722; JP 51160599 A 19980722; RU 99109469 A 19980722; US 24297999 A 19990226