

Title (en)
Double-chuck mechanical pencil

Title (de)
Füllminenstift mit zwei Spannbacken

Title (fr)
Porte-mine à deux pinces de serrage

Publication
EP 0863023 A3 20000628 (EN)

Application
EP 97310618 A 19971224

Priority
JP 6175497 A 19970303

Abstract (en)
[origin: EP0863023A2] The invention is intended to prevent, in a double-chuck mechanical pencil provided with an eraser, the torsional breakage of a lead gripped by a front lead chuck and a back lead chuck due to the turning of a lead tank caused when an eraser is used, and to eliminate inconvenience to a lead supplying operation caused by the abrasion of the eraser. A double-chuck mechanical pencil having a front lead chuck (11) for holding a lead and a back lead chuck (5) for advancing a lead, comprises a barrel (1), a lead tank (4) connected to the back lead chuck (5), an adapter (3) fixedly put on a back portion of the lead tank (4), restrained from rotation relative to the barrel (1) and axially movable, and a rotary eraser projecting mechanism (12) provided with a support member (13) or an eraser support structure (16) provided with a support member (17) restrained from rotation relative to the adapter (3) and detachably connected to a back portion of the adapter (3). <IMAGE>

IPC 1-7
B43K 21/22; **B43K 21/12**; **B43K 29/02**

IPC 8 full level
B43K 21/20 (2006.01); **B43K 29/02** (2006.01)

CPC (source: EP KR)
B43K 21/00 (2013.01 - KR); **B43K 21/20** (2013.01 - EP); **B43K 21/22** (2013.01 - KR); **B43K 29/02** (2013.01 - EP)

Citation (search report)

- [Y] EP 0715968 A1 19960612 - KOTOBUKI & CO LTD [JP]
- [Y] EP 0321581 A1 19890628 - PENTEL KK [JP]
- [A] US 5018891 A 19910528 - KAGEYAMA HIDEHEI [JP], et al
- [AP] US 5683191 A 19971104 - KAGEYAMA SHUHEI [JP], et al

Cited by
EP1325818A1; EP1391323A1; CN108698433A; EP3450197A4; US6935799B2

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

DOCDB simple family (publication)
EP 0863023 A2 19980909; **EP 0863023 A3 20000628**; **EP 0863023 B1 20030326**; CN 2323976 Y 19990616; KR 19980065047 U 19981125; KR 200162605 Y1 19991215; TW 356768 U 19990421

DOCDB simple family (application)
EP 97310618 A 19971224; CN 98209022 U 19980213; KR 19970040337 U 19971224; TW 86219484 U 19971121