

Title (en)  
Sharpener with integrated protective cap

Title (de)  
Spitzer mit integrierter Schutzkappe

Title (fr)  
Taille crayon avec capuchon de protection intégré

Publication  
**EP 1647416 A1 20060419 (DE)**

Application  
**EP 04024723 A 20041016**

Priority  
EP 04024723 A 20041016

Abstract (en)  
A pencil cap (4) is articulated with respect to a sharpener housing (2) via hinge (5). The cap is turned about the hinge axis (14), tangential to the cap and the housing, to either closed position (15) or opened position, blocking or allowing pencil entry into the pencil introduction opening of the housing.

IPC 8 full level  
**A45D 40/20** (2006.01); **B43K 29/06** (2006.01); **B43L 23/08** (2006.01)

CPC (source: EP US)  
**B43K 23/10** (2013.01 - EP US); **B43K 29/00** (2013.01 - EP US); **B43K 29/004** (2013.01 - EP US); **B43K 29/02** (2013.01 - EP US);  
**B43K 29/06** (2013.01 - EP US); **B43L 23/08** (2013.01 - EP US); **A45D 40/20** (2013.01 - EP US)

Citation (applicant)  
• DE 202004005040 U1 20040603 - EISEN GMBH [DE]  
• EP 1120285 A1 20010801 - KUM LTD [IE]  
• US 6568090 B2 20030527 - SHEFFLER ROBERT [US], et al

Citation (search report)  
• [AD] DE 202004005040 U1 20040603 - EISEN GMBH [DE]  
• [A] US 2514761 A 19500711 - JOHAN HAVNEN EGIL  
• [AD] EP 1120285 A1 20010801 - KUM LTD [IE]  
• [A] US 5987759 A 19991123 - NITA ILIE [US]  
• [A] US 2003194255 A1 20031016 - SILBERMAN BARRY [US]  
• [X] US 4406315 A 19830927 - BRICKHOUSE TODD [US]  
• [A] DE 2851486 A1 19800604 - ESSL GEORG  
• [A] EP 0649759 A1 19950426 - KLEBES KUNSTSTOFF [DE]

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DE FR GB IT

DOCDB simple family (publication)  
**DE 202005000074 U1 20060223**; DE 502004005707 D1 20080124; EP 1647416 A1 20060419; EP 1647416 B1 20071212;  
EP 1647416 B9 20080514; US 2006080846 A1 20060420

DOCDB simple family (application)  
**DE 202005000074 U 20050105**; DE 502004005707 T 20041016; EP 04024723 A 20041016; US 25234005 A 20051017