Title (en)

MECHANICAL PENCIL WITH AN AUTOMATICALLY PROPELLED LEAD

Publication

EP 0276362 B1 19901205 (EN)

Application

EP 87112007 A 19870819

Priority

- JP 1736387 A 19870129
- JP 3155787 U 19870304

Abstract (en)

[origin: EP0276362A1] A mechanical pencil with an automatically propelled lead, comprising substantially tubular body means (1, 7, 23) having a writing end from which a tubular lead guide (2) partly protrudes under the bias of a spring (6), the lead guide receiving a lead (3) therein and being retractable into the body means against the bias of the spring with the wear of the lead, a friction member (4) mounted to the lead guide and engaging the lead so as to normally cause the lead to travel with the lead guide, and chuck means (5, 11, 12, 13) mounted within the body means for gripping the lead against axial displacement in a direction away from the writing end of the body means while permitting the lead to slide axially toward the writing end. In order to prevent the retracting lead guide (2) from being sprung back each time the pencil is moved off the writing surface, one-way locking means (9, 2C; 9, 5K; 9, 20A; 9, 1H; 20G, 25; 1M, 20G; 1N, 20H; 9, 31A; 9, 30E) are provided for locking the lead guide against displacement only in a direction toward the writing end of the body means. Also provided are unlocking means (2D, 8B; 17, 18; 8B, 19; 5L, 8C; 2C; 8B, 1J; 8C; 2D; 20F, 26; 8, 30A; 8, 39B; 8, 30A; 8, 20A) for causing the one-way locking means to permit the lead guide, as well as the lead being engaged by the friction member (4), to travel toward the marking end of the body means under the bias of the spring (6) when the lead is worn to a prescribed degree.

IPC 1-7

B43K 21/02

IPC 8 full level

B43K 21/033 (2006.01); B43K 21/04 (2006.01)

CPC (source: EP KR)

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Cited by

EP1018441A1; CN103192625A; EP2347997A2

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